

## THE HOO, 17 LYNTHURST GARDENS, LONDON

### MONTHLY UNATTENDED CONSTRUCTION AIR QUALITY AND NOISE MONITORING REPORT REPORT PREPARED BY RF ENVIRONMENTAL LTD

Report Reference	Report Date	Author	Checked
RFE-0520-23-02-02	1 <sup>st</sup> November 2023	JHP	RJF

#### Monitoring Period:

Friday 8<sup>th</sup> September to Tuesday 31<sup>st</sup> October 2023

#### Monitoring Locations and Compliance:

Monitoring Location ID	Location Description	Number of Days PM <sub>10</sub> / Noise Site Action Level Exceeded?	
		Amber	Red
AQ1 (PM <sub>10</sub> )	North East Boundary	-	-
AQ2 (PM <sub>10</sub> )	South West Boundary	-	-
N1 (Noise)	South West Boundary	-	-

**TABLE 1 : SUMMARY OF SITE ACTION LEVEL EXCEEDANCES THROUGHOUT MONITORING PERIOD**

Notes: The summary values presented in Table 1 above represent the number of days an exceedance has occurred at the monitoring location.



**FIGURE 1: PM<sub>10</sub> AND NOISE MONITORING LOCATIONS**

## Core Site Working Periods:

Weekdays – 08:00 hrs to 18:00hrs; and  
Saturday – 08:00 hrs to 13:00hrs.

## Local Authority:

London Borough of Camden (LBC)

## Assessment Criteria:

### Dust

Dust levels produced by construction works shall not exceed the following limits at the surrounding receptors:

Site Action Level	
Dust (PM <sub>10</sub> , µgm <sup>-3</sup> 15 min)	
Amber	Red
200	250

**TABLE 2: PM<sub>10</sub> LIMITS FOR CONSTRUCTION PHASE**

### Noise

Noise levels produced by construction works shall not exceed the following limits at the surrounding receptors:

Site Action Level			
Noise, dB (L <sub>Aeq,15min</sub> )		Noise, dB (L <sub>Aeq,10hr</sub> )	
Amber	Red	Amber	Red
75	80	70	75

**TABLE 3: NOISE LIMITS FOR CONSTRUCTION PHASE**

## Monitoring Equipment:

Details of the dust and noise monitoring equipment are presented in Appendix B.

A history of the weather conditions during the survey period has been obtained from an internet source ([www.wunderground.com](http://www.wunderground.com)) and are presented in Appendix C.

## Comments:

The PM<sub>10</sub> and noise monitoring during this period was undertaken prior to the commencement of any works on site, to obtain an understanding of the baseline conditions at the site.

An initial period of PM<sub>10</sub> and noise baseline monitoring was undertaken between Tuesday 13<sup>th</sup> June and Tuesday 11<sup>th</sup> July 2023. The results of this baseline monitoring are presented in the Construction



Dust & Noise Management Plan (Ref: RFE-0520-23-01-02) for the site. The additional period of baseline monitoring, presented in this report, was agreed with LBC on 21<sup>st</sup> September 2023.

There were periods where no PM<sub>10</sub> monitoring data was recorded due to on-site power loss. These periods are summarised below:

#### AQ1

- Between 10:15hrs and 11:30hrs on Thursday 14<sup>th</sup> September 2023;
- Between 22:15hrs on Wednesday 20<sup>th</sup> September and 06:45hrs on Thursday 21<sup>st</sup> September 2023;
- Between 11:45hrs and 12:15hrs on Tuesday 10<sup>th</sup> October 2023; and
- Between 13:30hrs Saturday 14<sup>th</sup> October and 06:45hrs Monday 16<sup>th</sup> October 2023.

#### AQ2

- Between 14:00hrs on Wednesday 13<sup>th</sup> September and 11:30hrs on Thursday 14<sup>th</sup> September 2023;
- Between 22:00hrs on Wednesday 20<sup>th</sup> September and 06:45hrs on Thursday 21<sup>st</sup> September 2023;
- Between 13:15hrs and 13:30hrs on Tuesday 10<sup>th</sup> October 2023; and
- Between 13:30hrs Saturday 14<sup>th</sup> October and 06:45hrs Monday 16<sup>th</sup> October 2023.

There was also a period of spurious data at N1 between 10:30hrs and 12:45hrs on Tuesday 17<sup>th</sup> October 2023. This period of spurious data has been removed from the analysis.

#### **Results:**

The results of the PM<sub>10</sub> and noise monitoring are summarised in the following sections of this report.

## Monitoring Results:

### AQ1 – North East Boundary

The results of the baseline PM<sub>10</sub> monitoring at AQ1 is summarised below in Table 4 are presented graphically in Figures A1 to A9 of Appendix A.

Statistics	PM <sub>10</sub>
Max 15 min, $\mu\text{g m}^{-3}$	40
Average 15 min, $\mu\text{g m}^{-3}$	8
Max 24hr, $\mu\text{g m}^{-3}$	28
Average 24hr, $\mu\text{g m}^{-3}$	10
Annual ave. of 24hr, $\mu\text{g m}^{-3}$	10
Number of exceedances of 50 $\mu\text{g m}^{-3}$ as 24 hr Mean (Period)	-
Exceedances of PM <sub>10</sub> 200 $\mu\text{g m}^{-3}$ dust response threshold (Period)	-
Exceedances of PM <sub>10</sub> 250 $\mu\text{g m}^{-3}$ dust response threshold (Period)	-
Data Capture % (Period)	96

**TABLE 4: SUMMARY OF PM<sub>10</sub> MONITORING RESULTS AT AQ1**

The PM<sub>10</sub> monitoring at AQ1 was undertaken prior to the commencement of any works on site in fulfilment of the requirements of LBC.

During the monitoring period between Friday 8<sup>th</sup> September 2023 and Tuesday 31<sup>st</sup> October 2023, the measured maximum and average PM<sub>10</sub> 15-minute  $\mu\text{g m}^{-3}$  values were 40 and 8, respectively.

The measured maximum and average PM<sub>10</sub> 24-hour  $\mu\text{g m}^{-3}$  values were 28 and 10, respectively.

## AQ2 – South West Boundary

The results of the baseline PM<sub>10</sub> monitoring at AQ2 is summarised below in Table 5 are presented graphically in Figures A10 to A17 of Appendix A.

Statistics	PM <sub>10</sub>
Max 15 min, $\mu\text{g m}^{-3}$	58
Average 15 min, $\mu\text{g m}^{-3}$	4
Max 24hr, $\mu\text{g m}^{-3}$	17
Average 24hr, $\mu\text{g m}^{-3}$	5
Annual ave. of 24hr, $\mu\text{g m}^{-3}$	5
Number of exceedances of 50 $\mu\text{g m}^{-3}$ as 24 hr Mean (Period)	-
Exceedances of PM <sub>10</sub> 200 $\mu\text{g m}^{-3}$ dust response threshold (Period)	-
Exceedances of PM <sub>10</sub> 250 $\mu\text{g m}^{-3}$ dust response threshold (Period)	-
Data Capture % (Period)	94

**TABLE 5: SUMMARY OF PM<sub>10</sub> MONITORING RESULTS AT AQ2**

The PM<sub>10</sub> monitoring at AQ1 was undertaken prior to the commencement of any works on site in fulfilment of the requirements of LBC.

During the monitoring period between Friday 8<sup>th</sup> September 2023 and Tuesday 31<sup>st</sup> October 2023, the measured maximum and average PM<sub>10</sub> 15-minute  $\mu\text{g m}^{-3}$  values were 58 and 4, respectively.

The measured maximum and average PM<sub>10</sub> 24-hour  $\mu\text{g m}^{-3}$  values were 17 and 5, respectively.

## N1 – South West Boundary

The results of the baseline noise monitoring at N1 are summarised below in Table 6 are presented graphically in Figures A18 to A21 of Appendix A.

Date	Measured Noise Levels, dB	
	Daytime (Monday to Friday 08:00hrs - 18:00hrs and Saturday 08:00hrs - 13:00hrs)	
	L <sub>Amax,F</sub>	L <sub>Aeq,T</sub>
Tue 10/10/23 <sup>[1]</sup>	68(87-59)	51
Wed 11/10/23	69(101-59)	56
Thu 12/10/23	76(92-63)	56
Fri 13/10/23	71(92-60)	57
Sat 14/10/23	76(96-62)	59
Mon 16/10/23	72(85-57)	52
Tue 17/10/23	73(92-58)	53
Wed 18/10/23	67(83-57)	54
Thu 19/10/23	69(87-60)	56
Fri 20/10/23	68(90-56)	51
Sat 21/10/23	69(85-59)	55
Mon 23/10/23	69(91-54)	56
Tue 24/10/23	79(97-65)	56
Wed 25/10/23	79(101-60)	55
Thu 26/10/23	65(79-57)	41
Fri 27/10/23	75(95-60)	49
Sat 28/10/23	69(90-59)	44
Mon 30/10/23	72(89-56)	52
Tue 31/10/23	69(84-56)	51
<b>Mean Average</b>	<b>71(65-79)</b>	<b>53</b>

**TABLE 5: SUMMARY OF NOISE MONITORING RESULTS AT N1 BETWEEN 13:45HRS ON TUESDAY 10<sup>TH</sup> OCTOBER 2023 AND 18:00HRS ON 31<sup>ST</sup> OCTOBER 2023**

Notes:

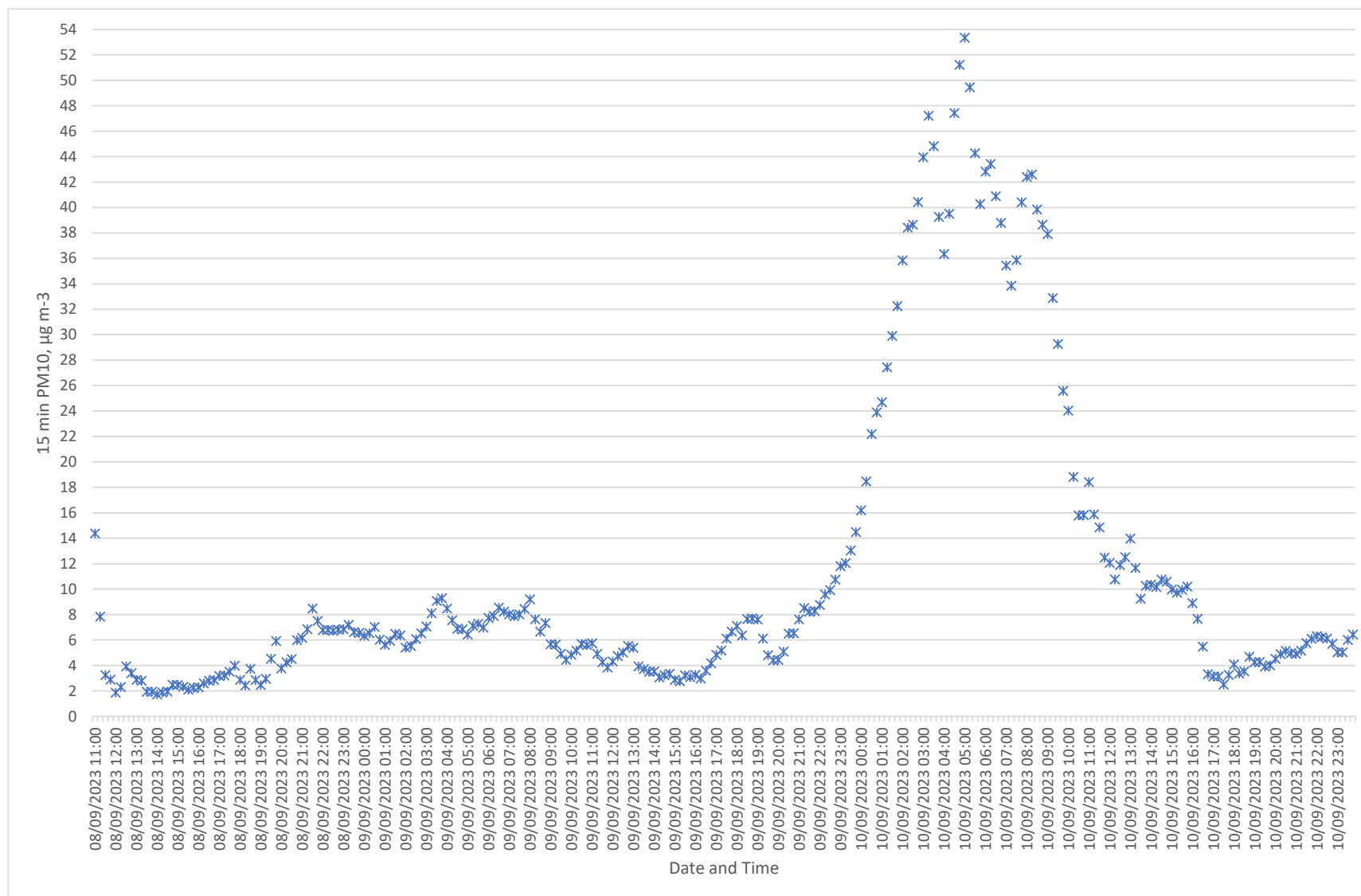
[1] Monitoring commenced at 13:45hr on Tuesday 10<sup>th</sup> October 2023.

The results of the noise measurement at N1 show that during the proposed construction working periods, ambient day time L<sub>Aeq,T</sub> noise levels ranged from 41 to 59 dB with an arithmetic mean average of 53 dB L<sub>Aeq,T</sub>.

Mean maximum noise levels ranged from 65 to 79 dB L<sub>Amax,F</sub>, with an arithmetic average of 71 dB.

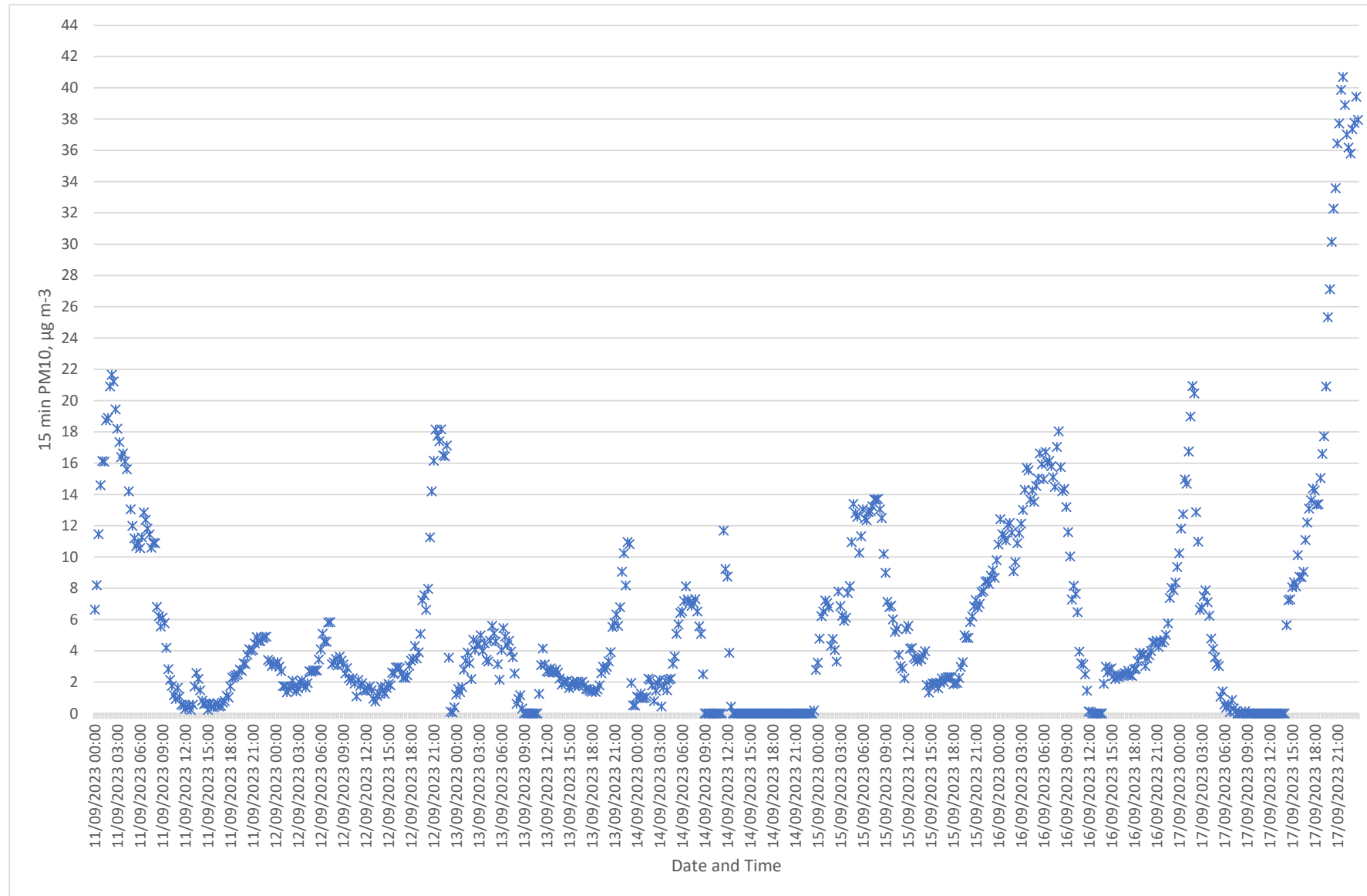


## **APPENDIX A: FIGURES**

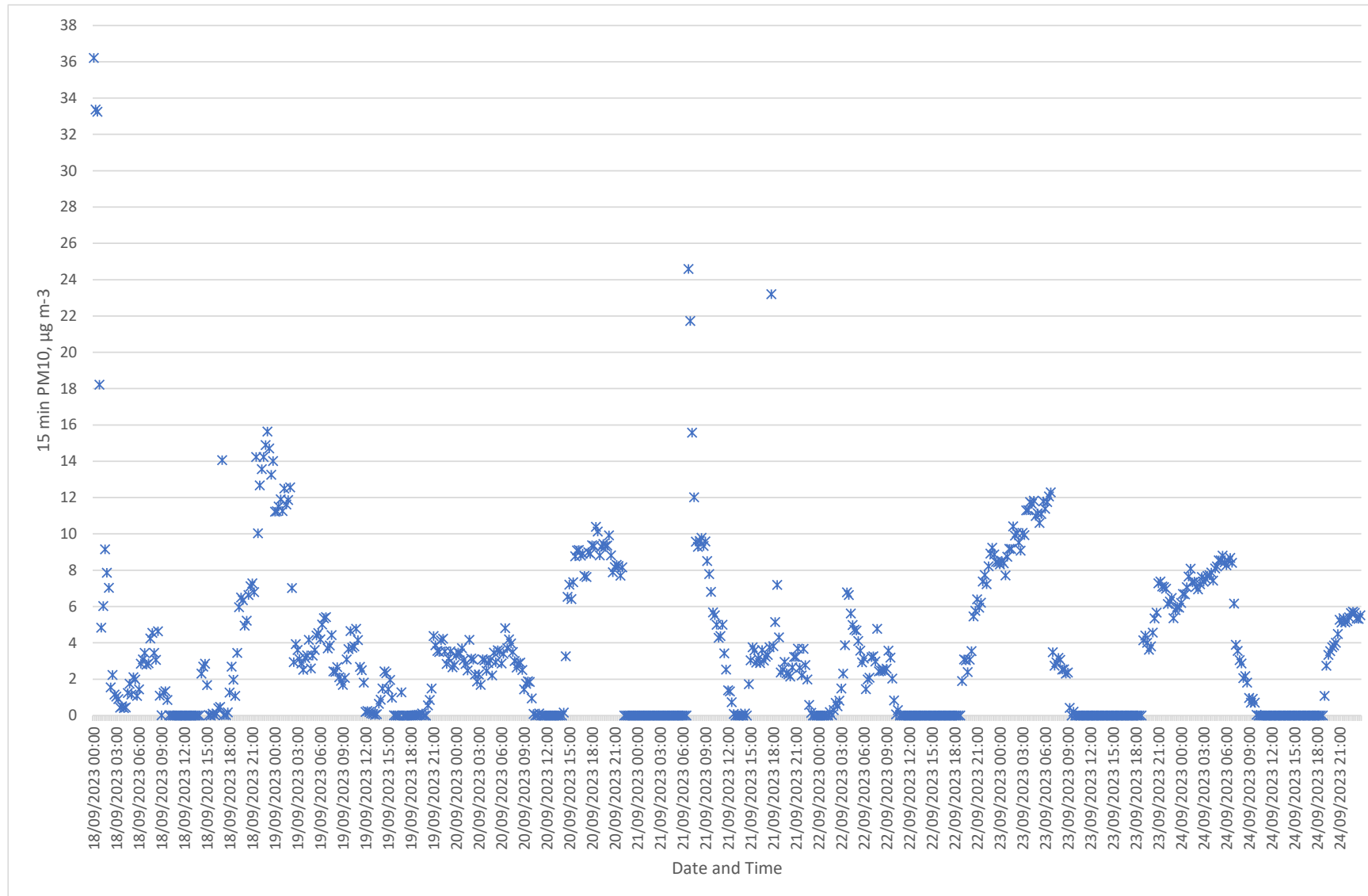


**FIGURE A1: SUMMARY OF PM10 MONITORING BETWEEN 8<sup>TH</sup> SEPTEMBER AND 10<sup>TH</sup> SEPTEMBER 2023 – AQ1**

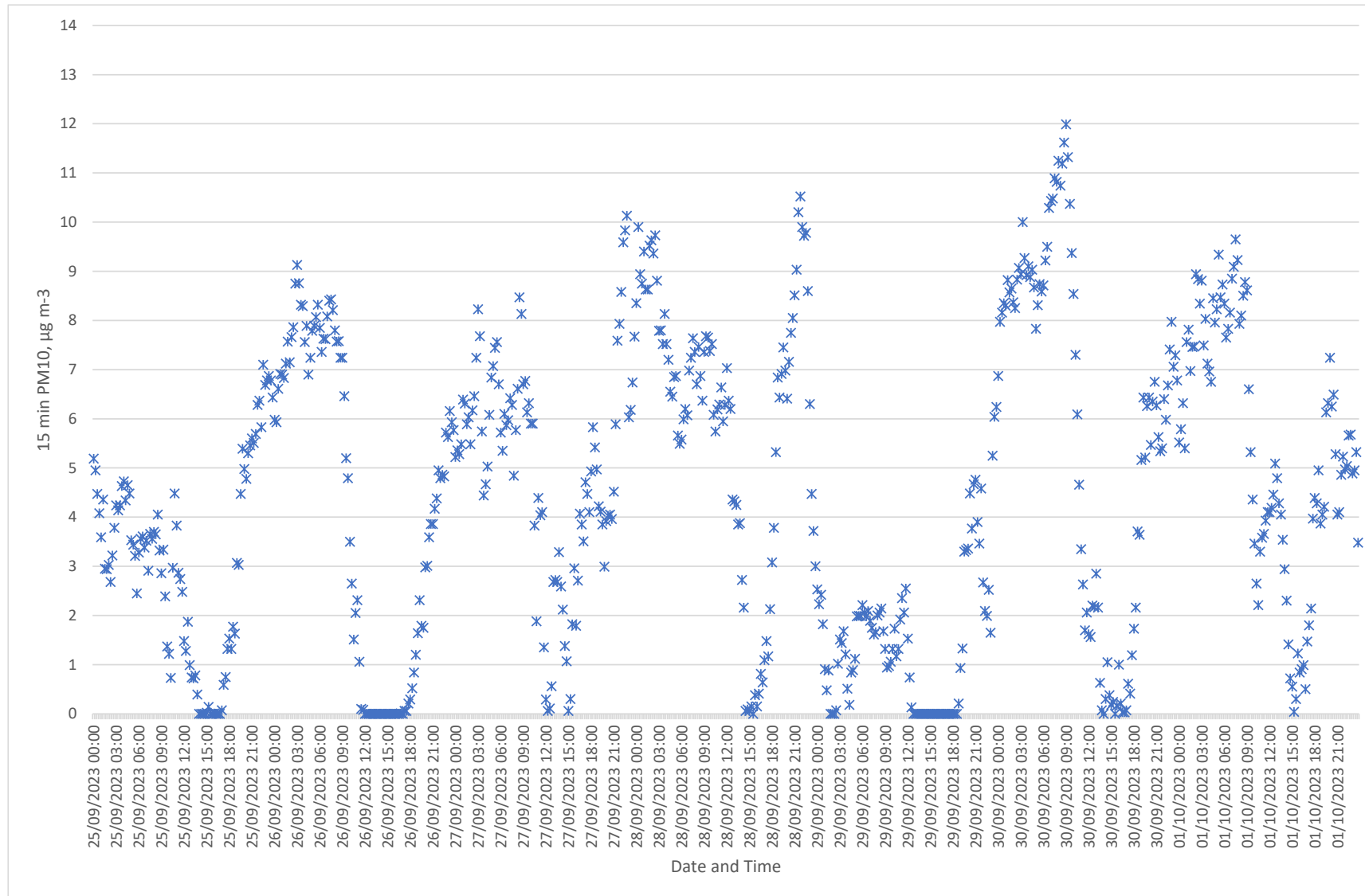




**FIGURE A2: SUMMARY OF PM10 MONITORING BETWEEN 11<sup>TH</sup> SEPTEMBER AND 17<sup>TH</sup> SEPTEMBER 2023 – AQ1**



**FIGURE A3: SUMMARY OF PM10 MONITORING BETWEEN 18<sup>TH</sup> SEPTEMBER AND 24<sup>TH</sup> SEPTEMBER 2023 – AQ1**



**FIGURE A4: SUMMARY OF PM10 MONITORING BETWEEN 25<sup>TH</sup> SEPTEMBER AND 1<sup>ST</sup> OCTOBER 2023 – AQ1**

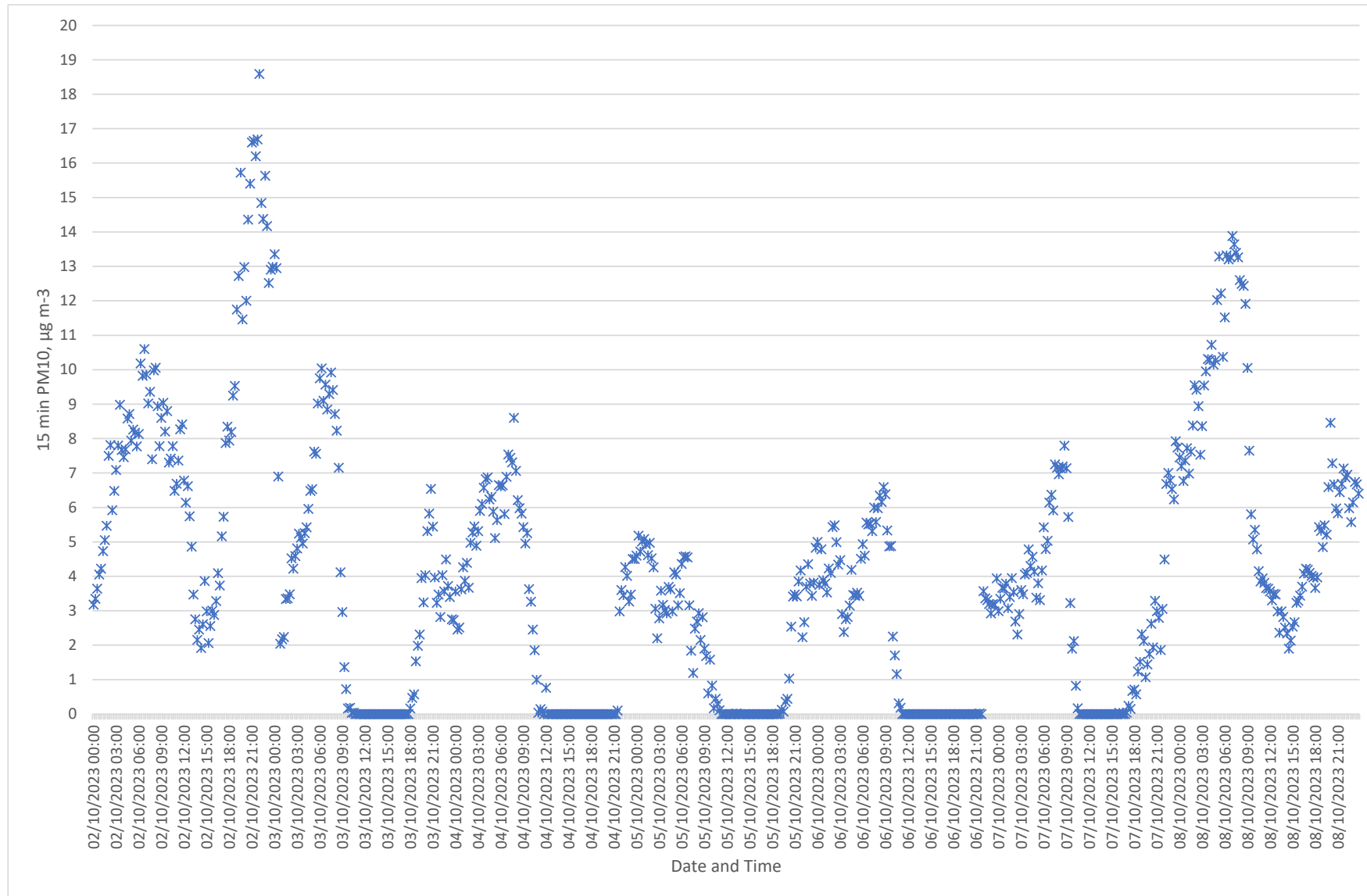
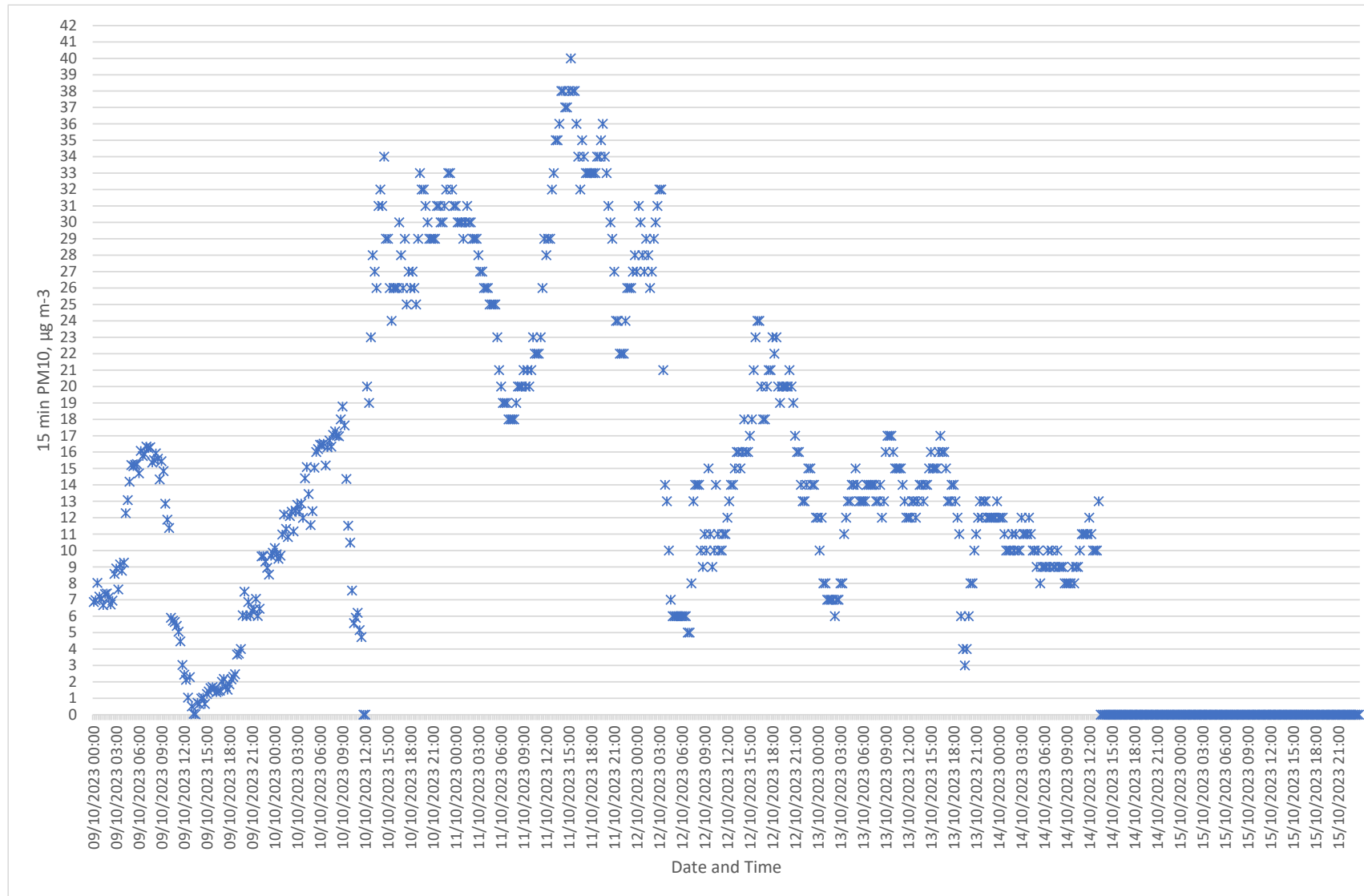
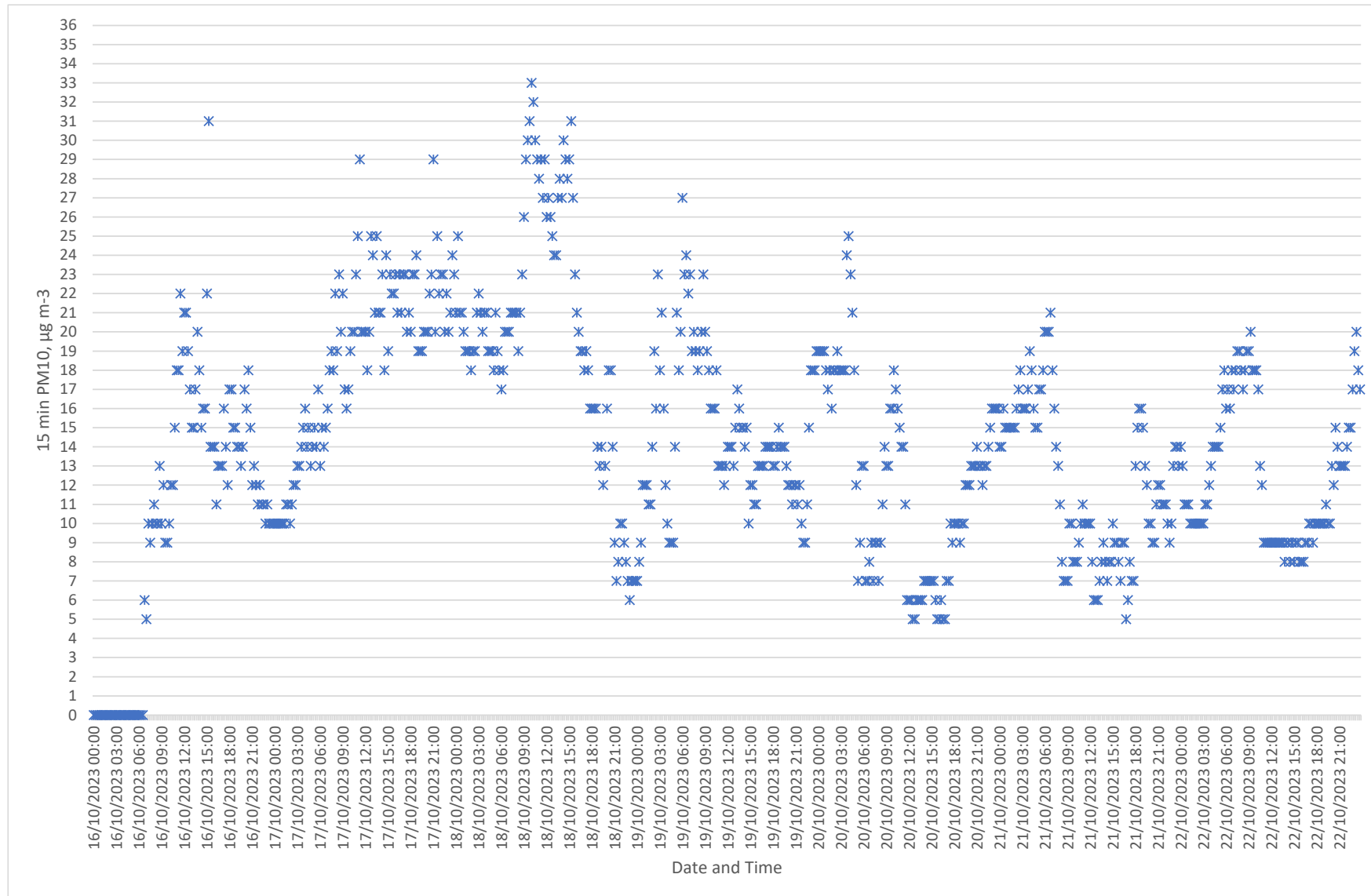


FIGURE A5: SUMMARY OF PM10 MONITORING BETWEEN 2<sup>ND</sup> OCTOBER AND 8<sup>TH</sup> OCTOBER 2023 – AQ1



**FIGURE A6: SUMMARY OF PM10 MONITORING BETWEEN 9<sup>TH</sup> OCTOBER AND 15<sup>TH</sup> OCTOBER 2023 – AQ1**



**FIGURE A7: SUMMARY OF PM10 MONITORING BETWEEN 16<sup>TH</sup> OCTOBER AND 22<sup>ND</sup> OCTOBER 2023 – AQ1**

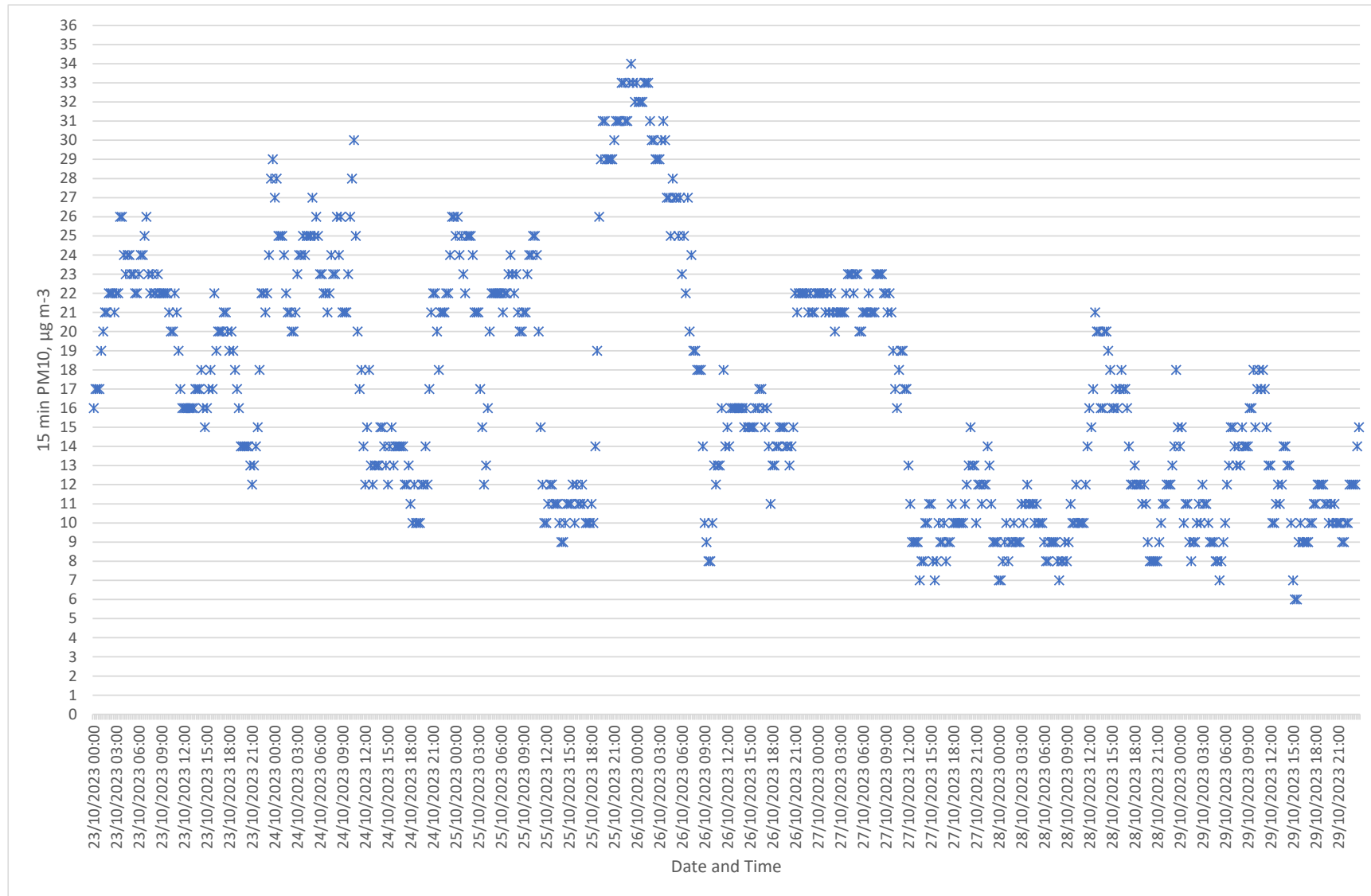


FIGURE A8: SUMMARY OF PM10 MONITORING BETWEEN 23<sup>RD</sup> OCTOBER AND 29<sup>TH</sup> OCTOBER 2023 – AQ1

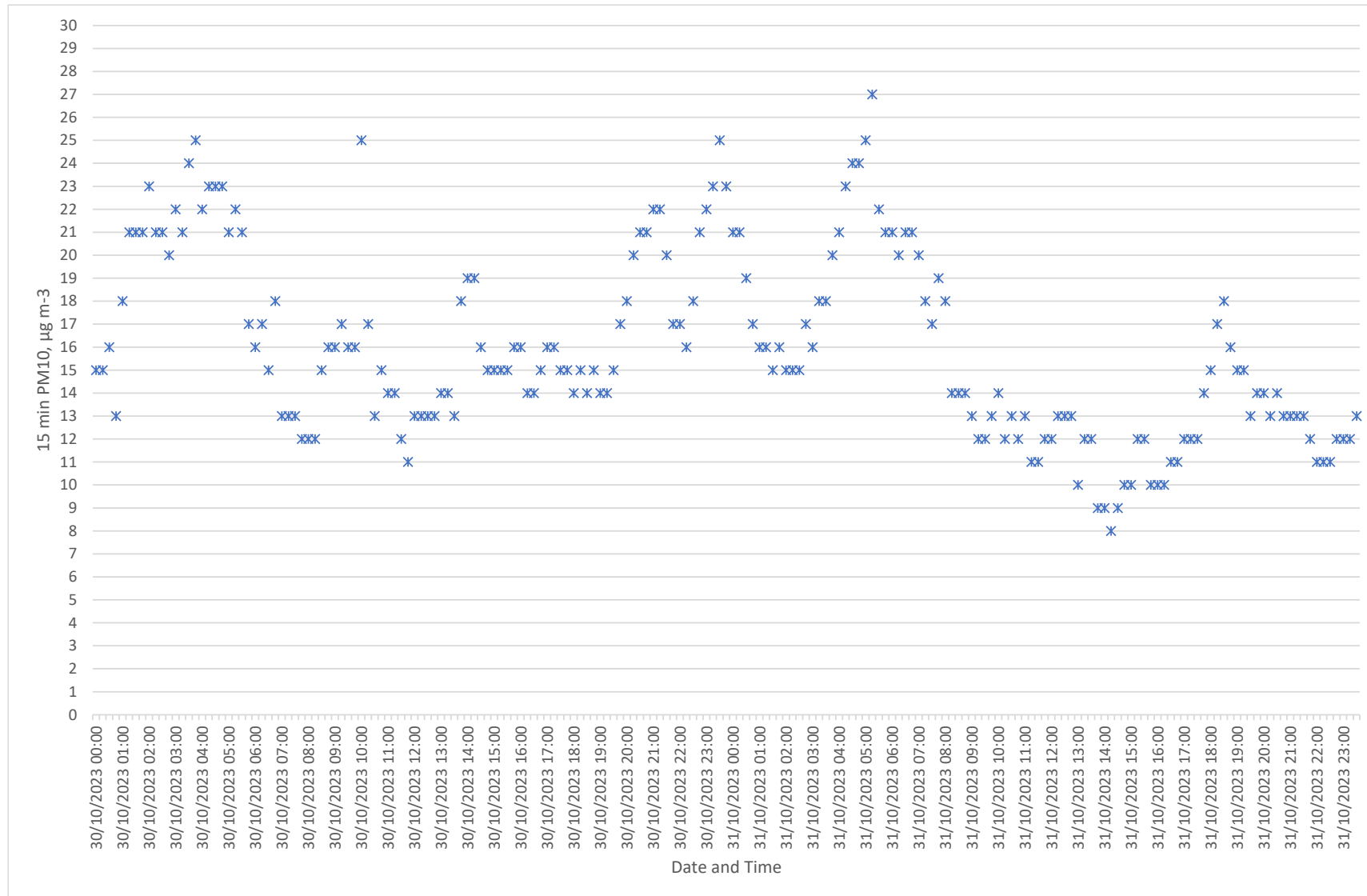
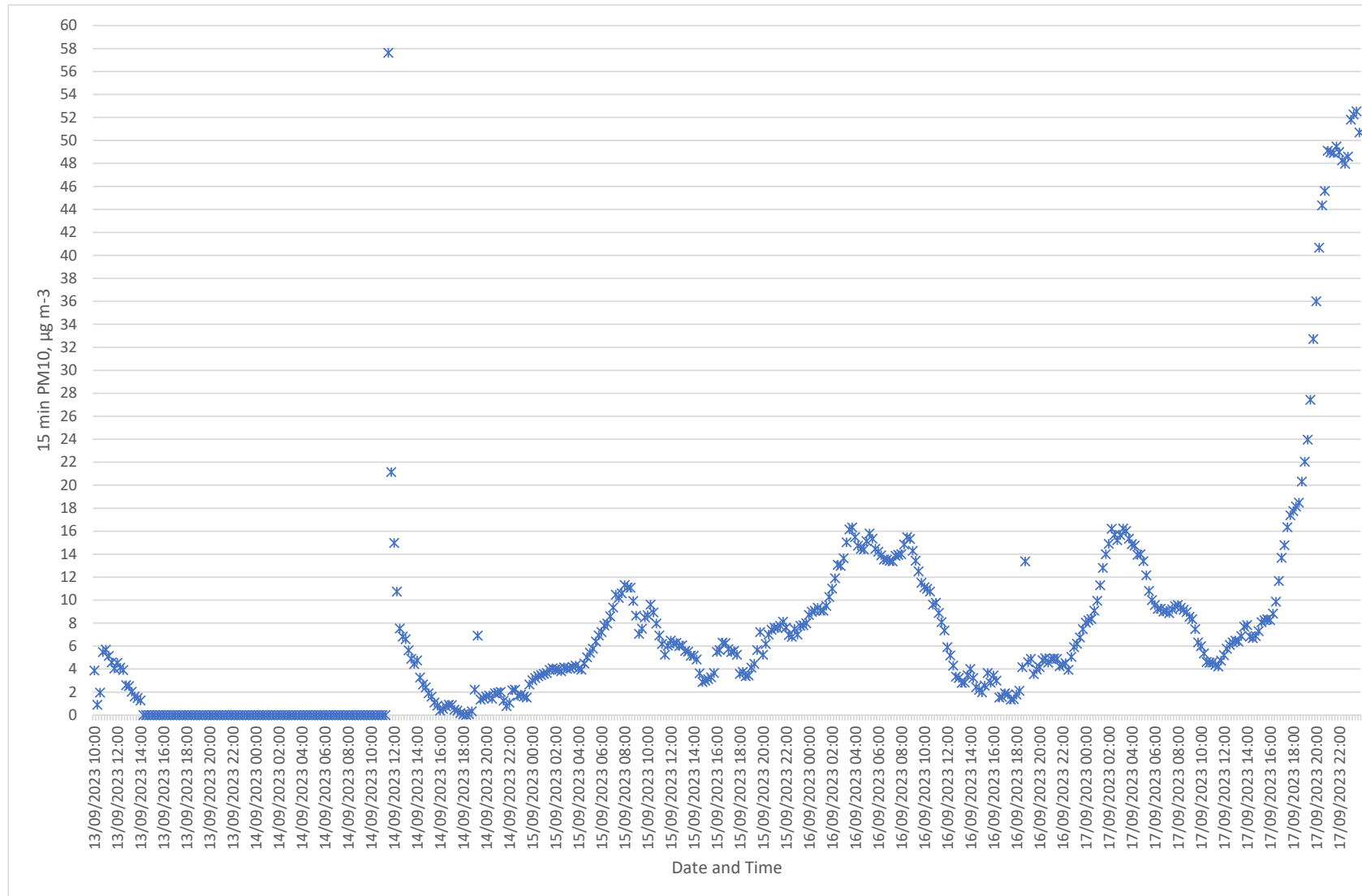
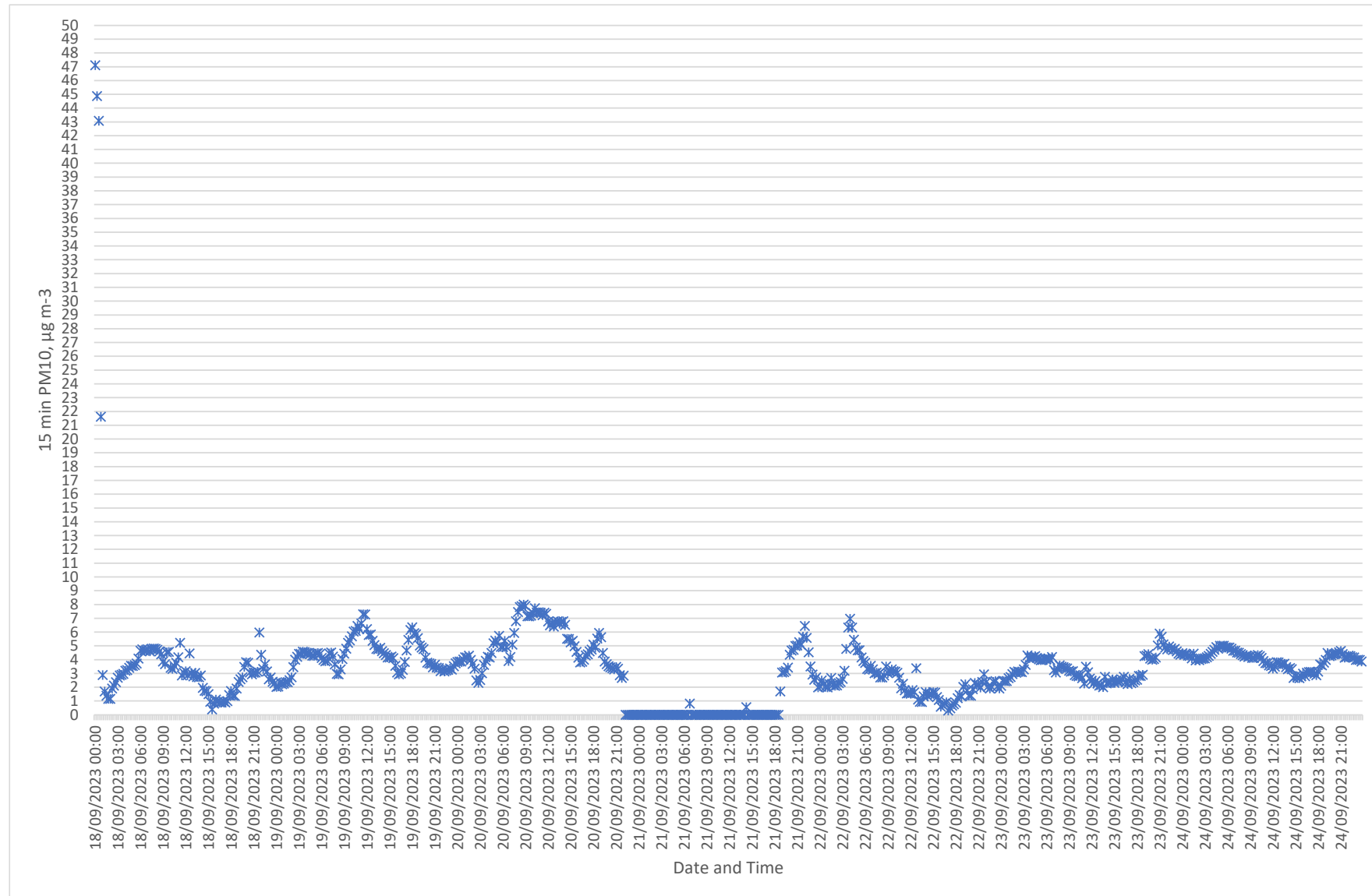


FIGURE A9: SUMMARY OF PM10 MONITORING BETWEEN 30<sup>TH</sup> OCTOBER AND 31<sup>ST</sup> OCTOBER 2023 – AQ1

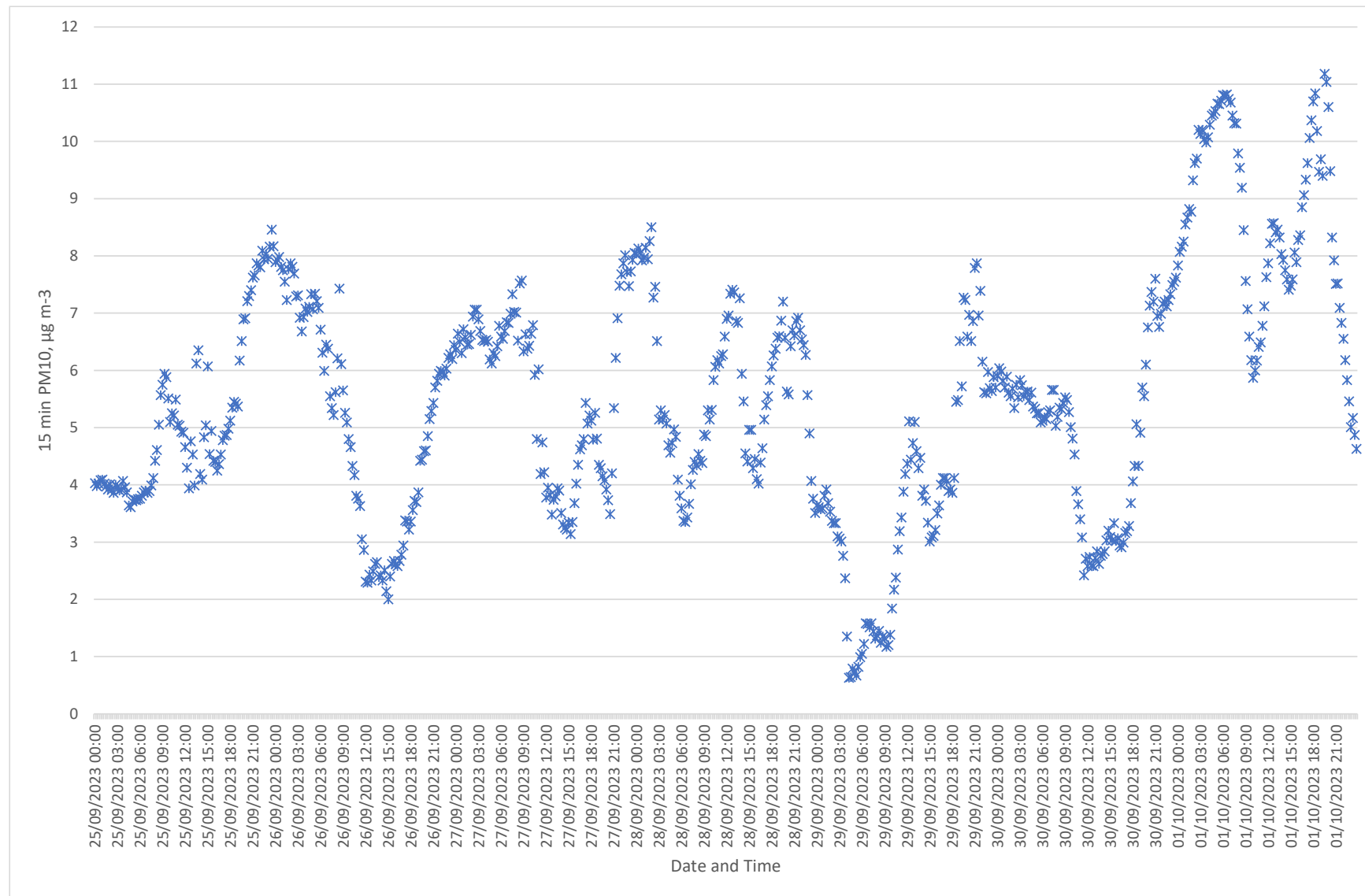




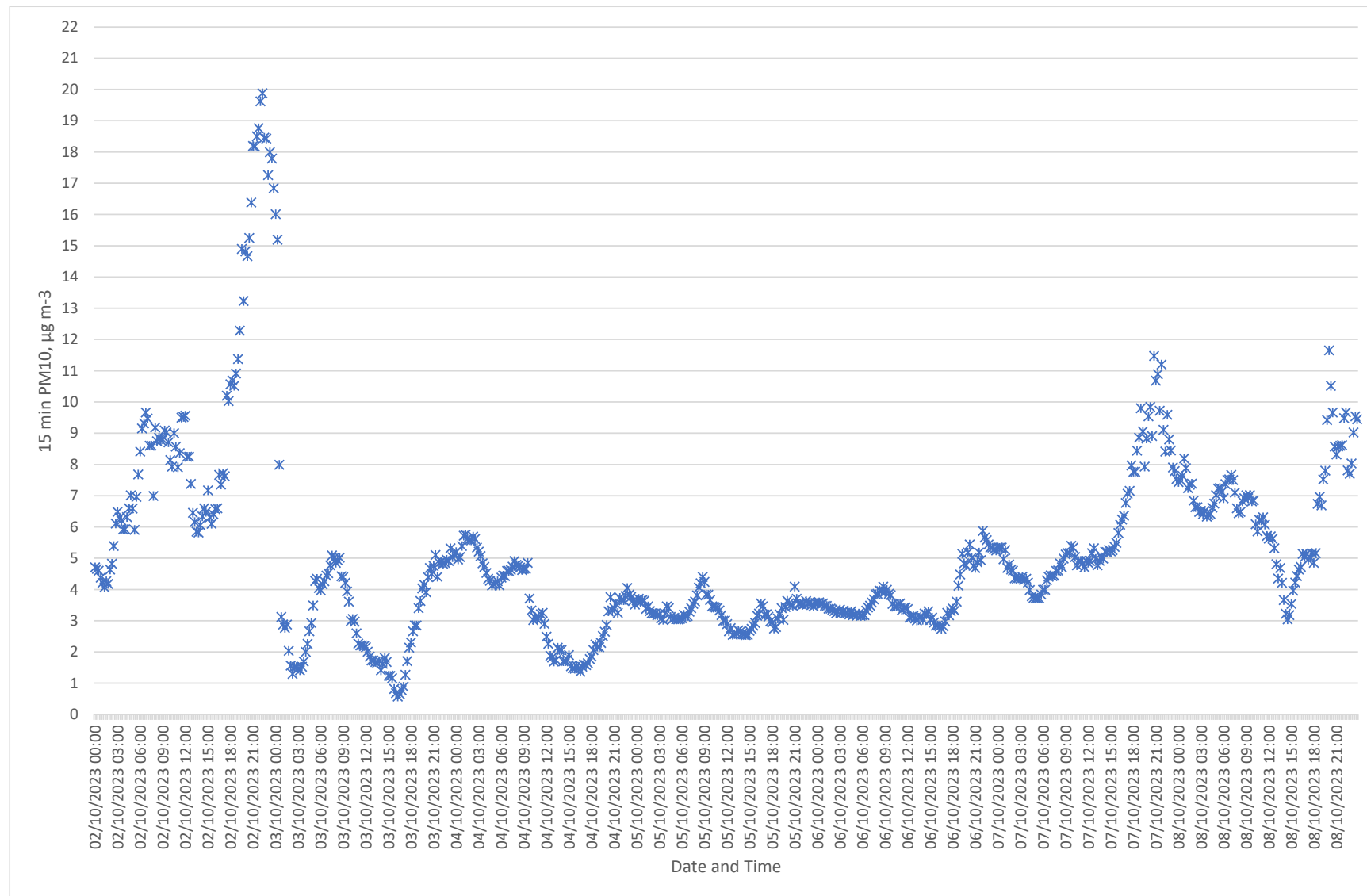
**FIGURE A10: SUMMARY OF PM10 MONITORING BETWEEN 13<sup>TH</sup> SEPTEMBER AND 17<sup>TH</sup> SEPTEMBER 2023 – AQ2**



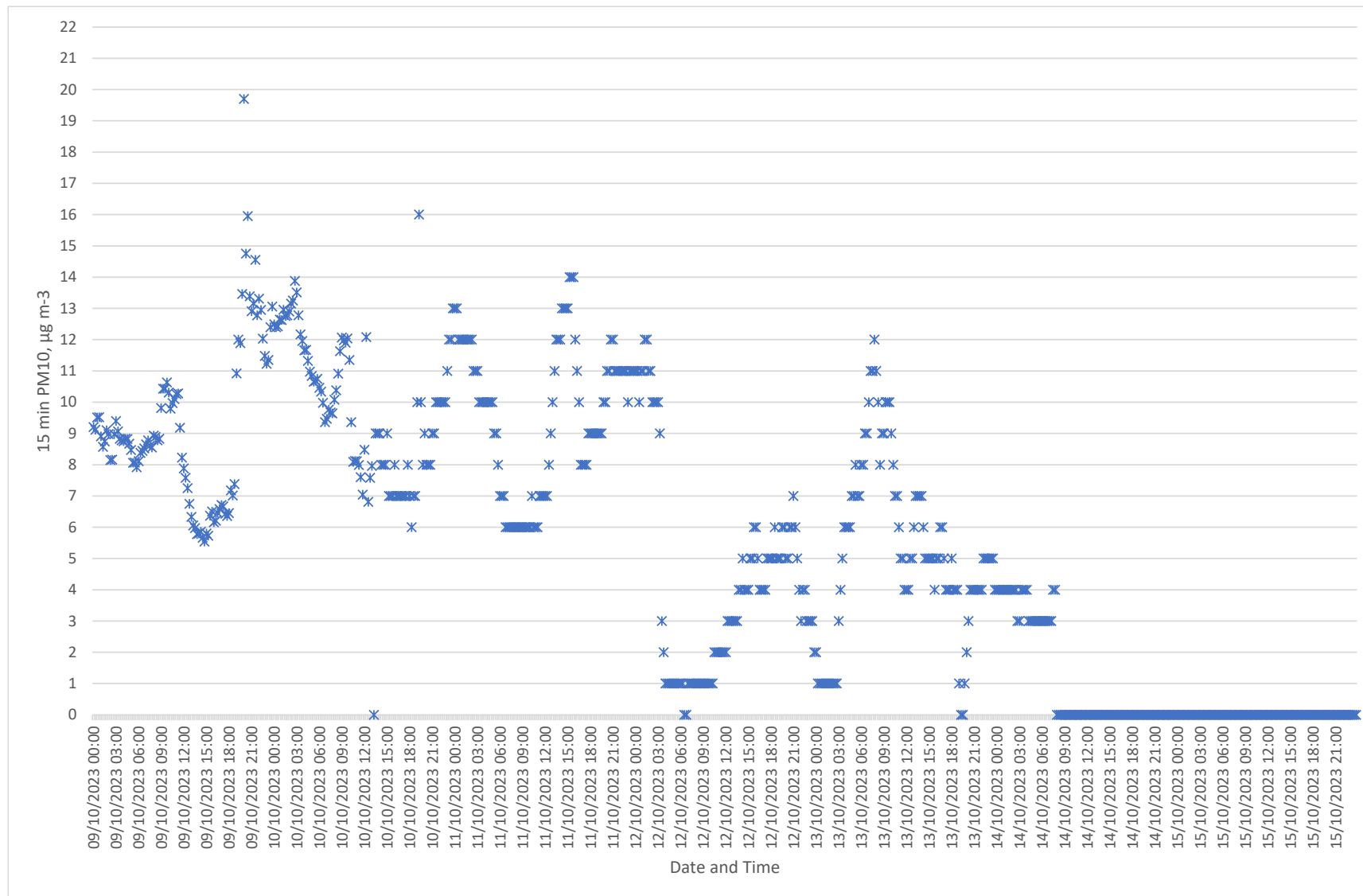
**FIGURE A11: SUMMARY OF PM10 MONITORING BETWEEN 18<sup>TH</sup> SEPTEMBER AND 24<sup>TH</sup> SEPTEMBER 2023 – AQ2**



**FIGURE A12: SUMMARY OF PM10 MONITORING BETWEEN 25<sup>TH</sup> SEPTEMBER AND 1<sup>ST</sup> OCTOBER 2023 – AQ2**



**FIGURE A13: SUMMARY OF PM10 MONITORING BETWEEN 2<sup>ND</sup> OCTOBER AND 8<sup>TH</sup> OCTOBER 2023 – AQ2**



**FIGURE A14: SUMMARY OF PM10 MONITORING BETWEEN 9<sup>TH</sup> OCTOBER AND 15<sup>TH</sup> OCTOBER 2023 – AQ2**

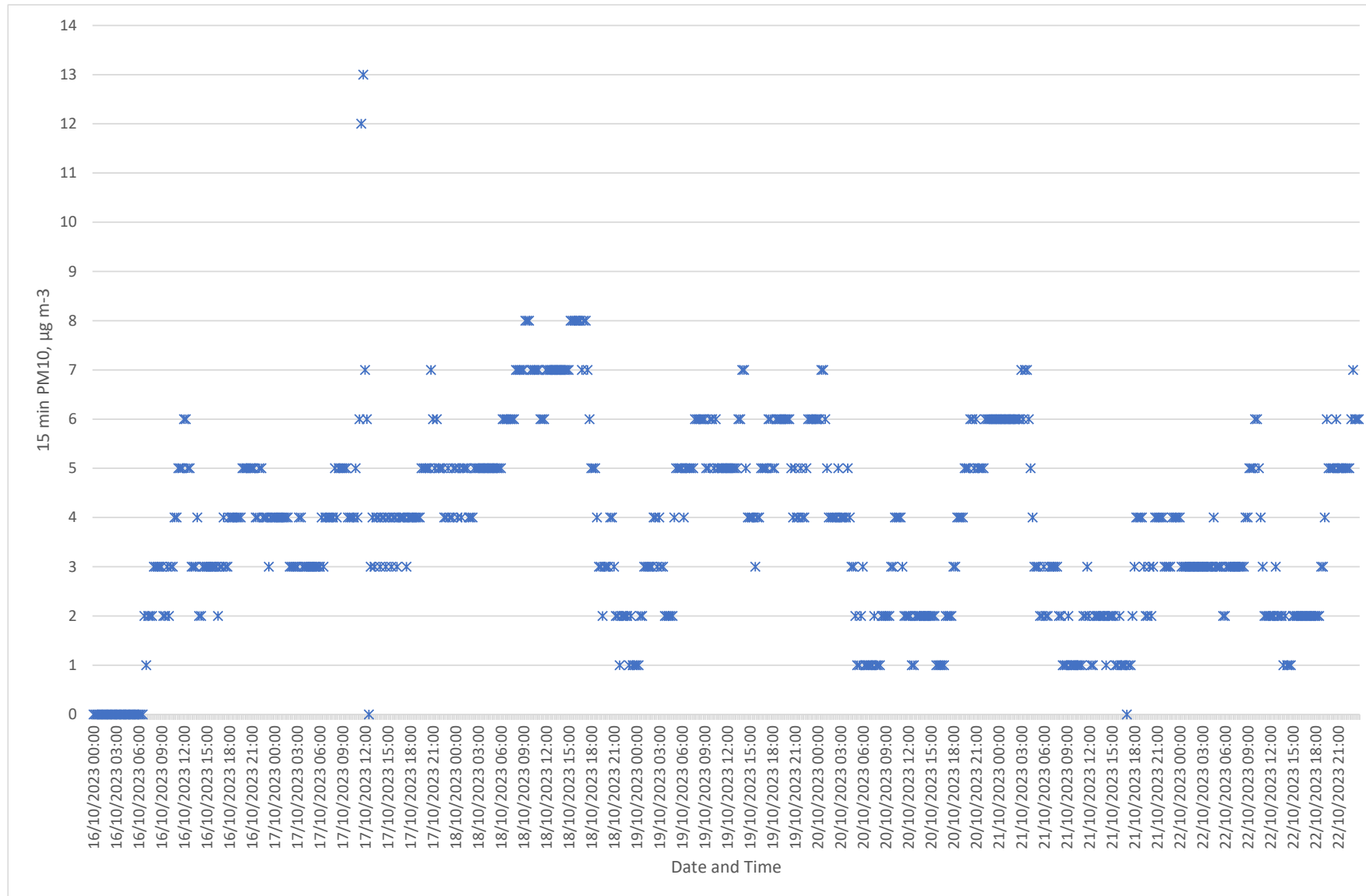


FIGURE A15: SUMMARY OF PM10 MONITORING BETWEEN 16<sup>TH</sup> OCTOBER AND 22<sup>ND</sup> OCTOBER 2023 – AQ2

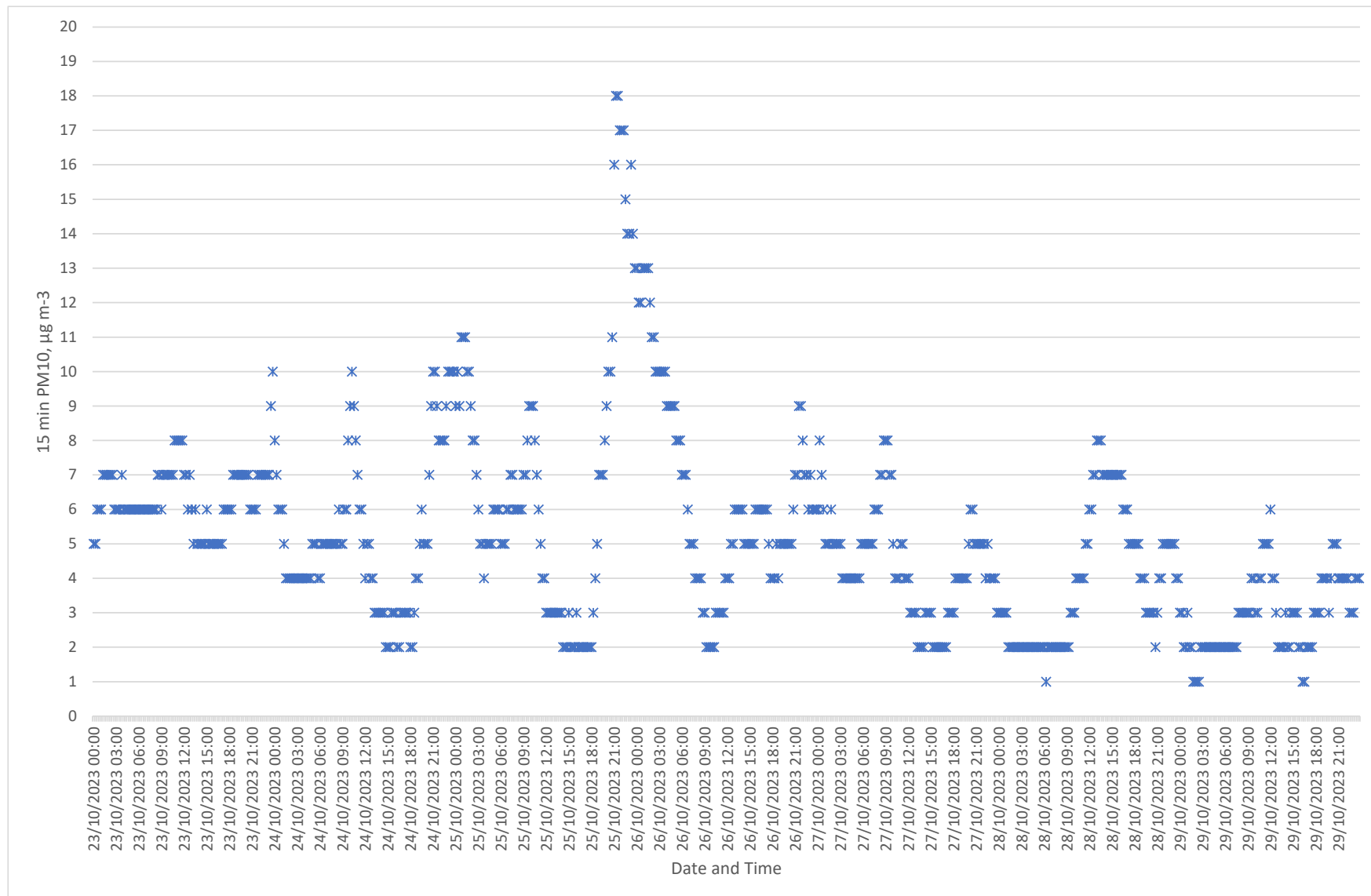


FIGURE A16: SUMMARY OF PM10 MONITORING BETWEEN 23<sup>RD</sup> OCTOBER AND 29<sup>TH</sup> OCTOBER 2023 – AQ2

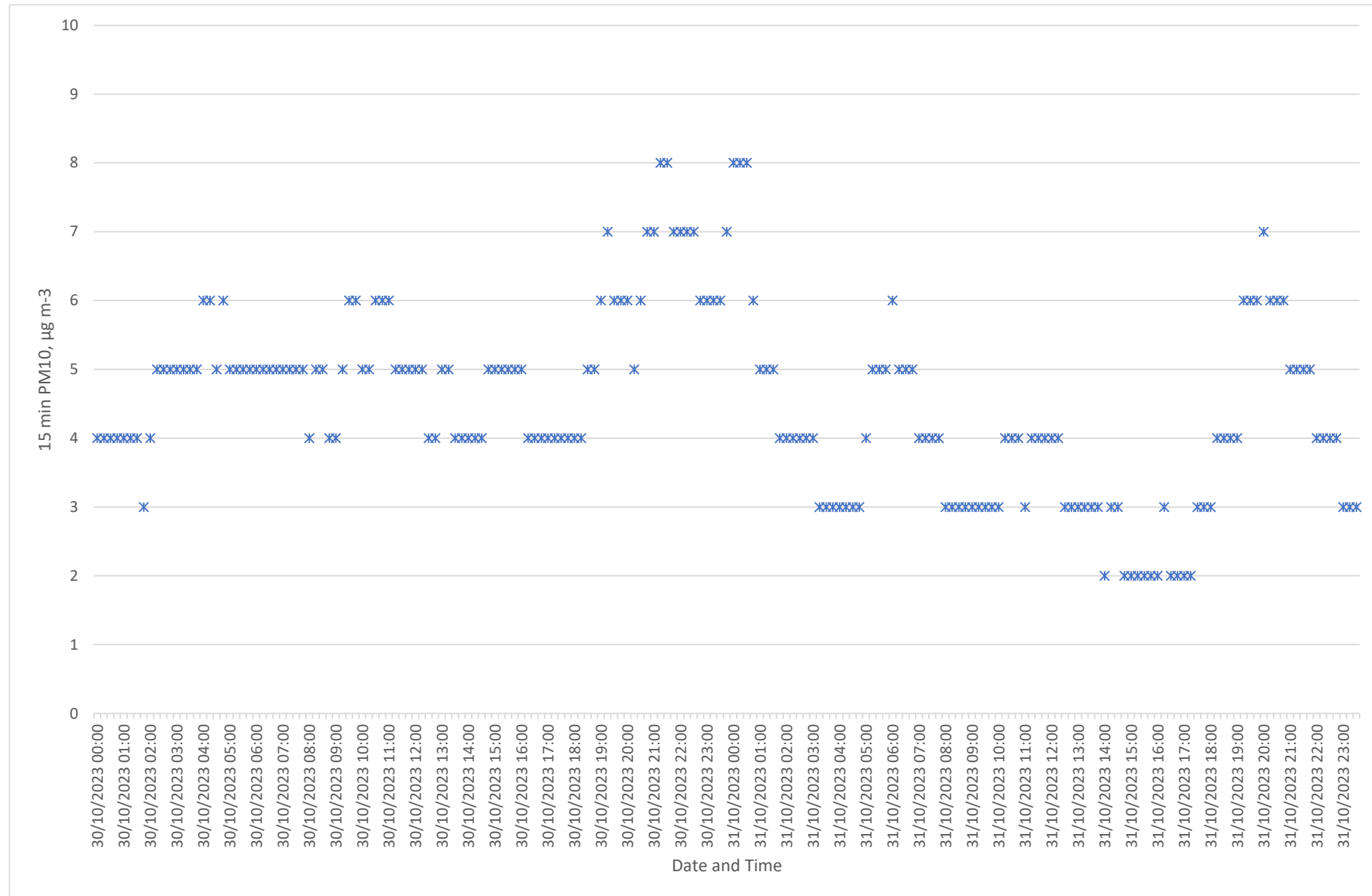


FIGURE A17: SUMMARY OF PM10 MONITORING BETWEEN 30<sup>TH</sup> OCTOBER AND 31<sup>ST</sup> OCTOBER 2023 – AQ2



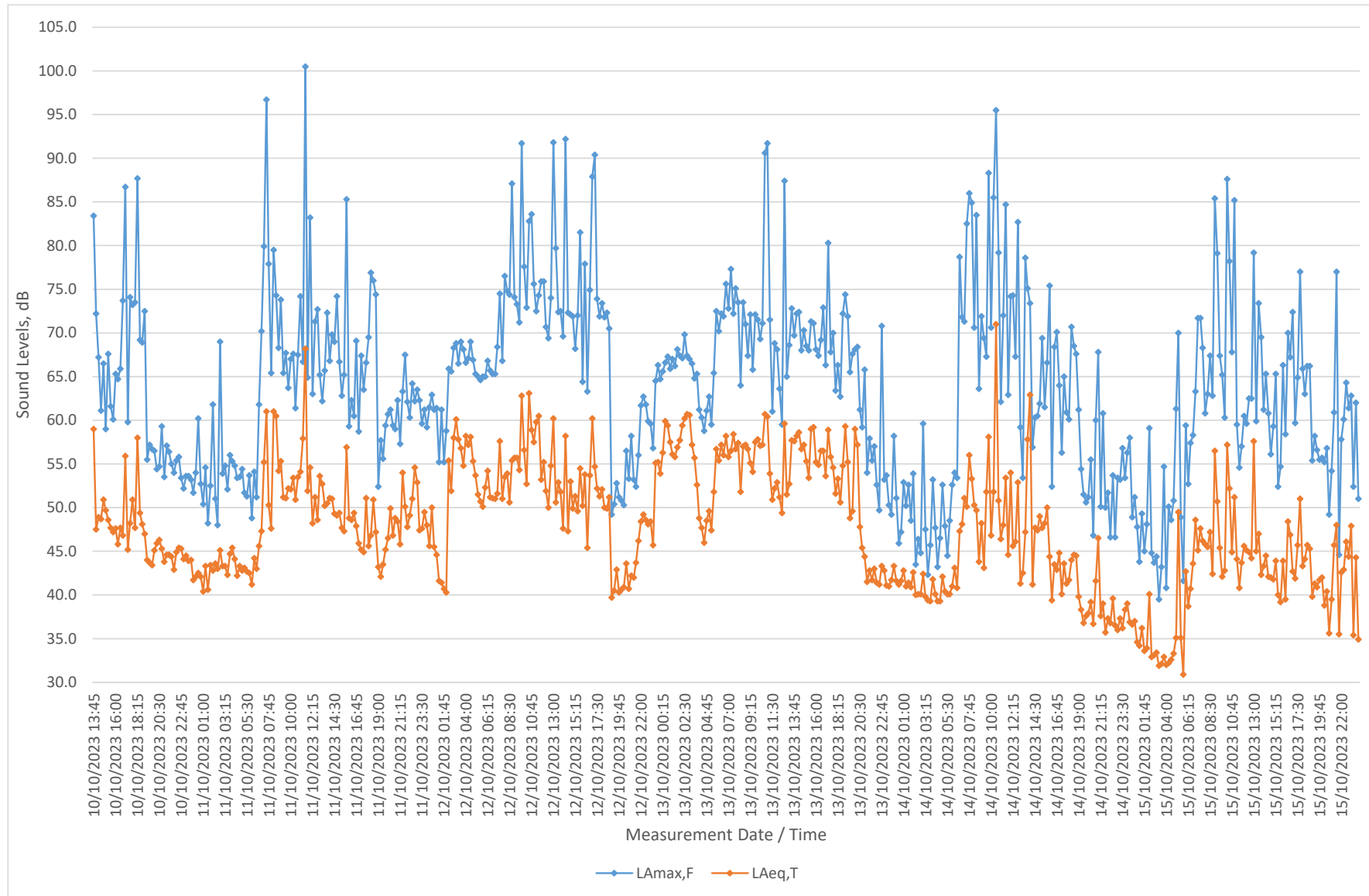


FIGURE A18: SUMMARY OF NOISE MONITORING BETWEEN 10<sup>TH</sup> OCTOBER AND 15<sup>TH</sup> OCTOBER 2023 – N1

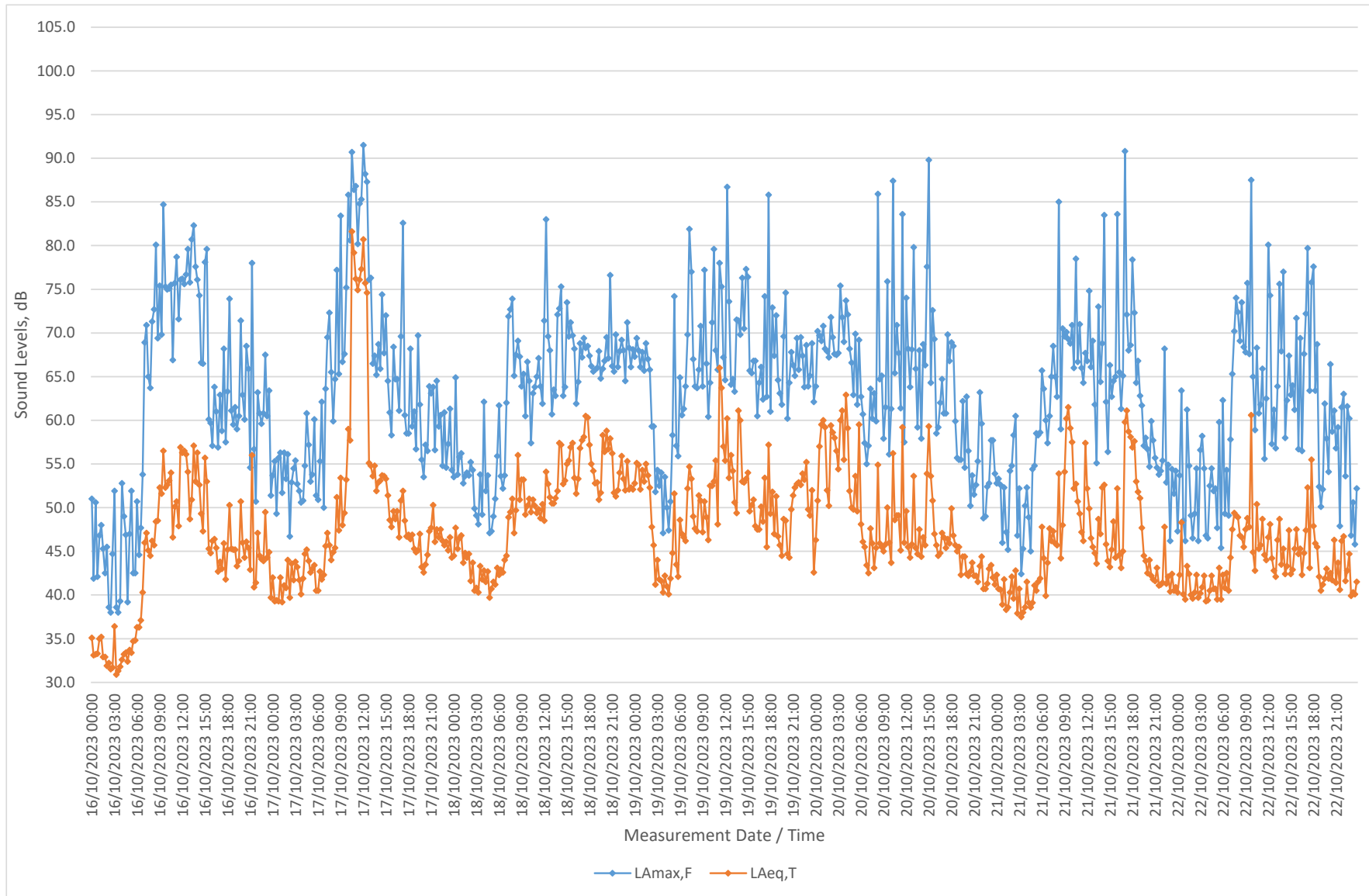


FIGURE A19: SUMMARY OF NOISE MONITORING BETWEEN 16<sup>TH</sup> OCTOBER AND 22<sup>ND</sup> OCTOBER 2023 – N1

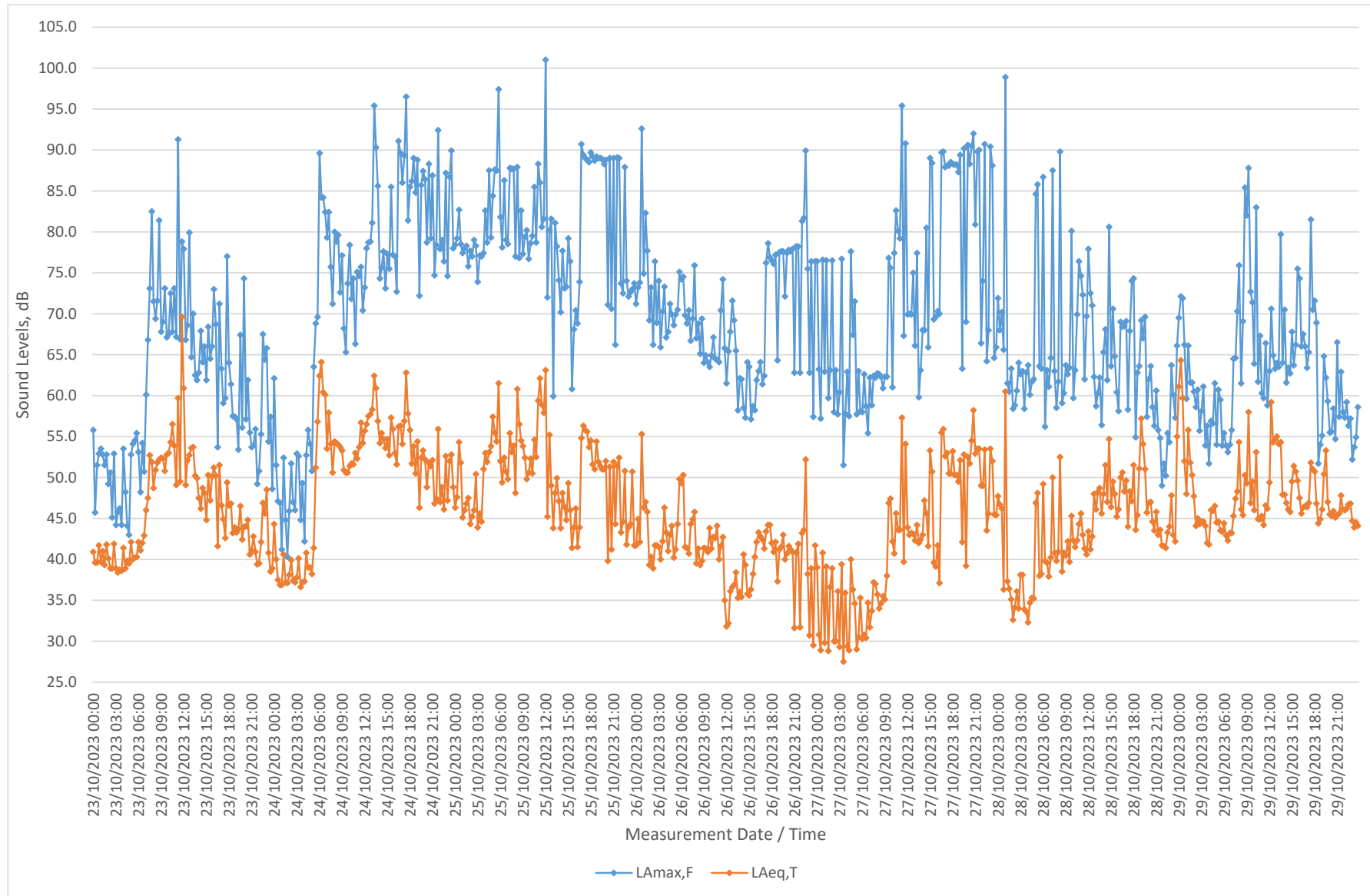


FIGURE A20: SUMMARY OF NOISE MONITORING BETWEEN 23<sup>RD</sup> OCTOBER AND 29<sup>TH</sup> OCTOBER 2023 – N1

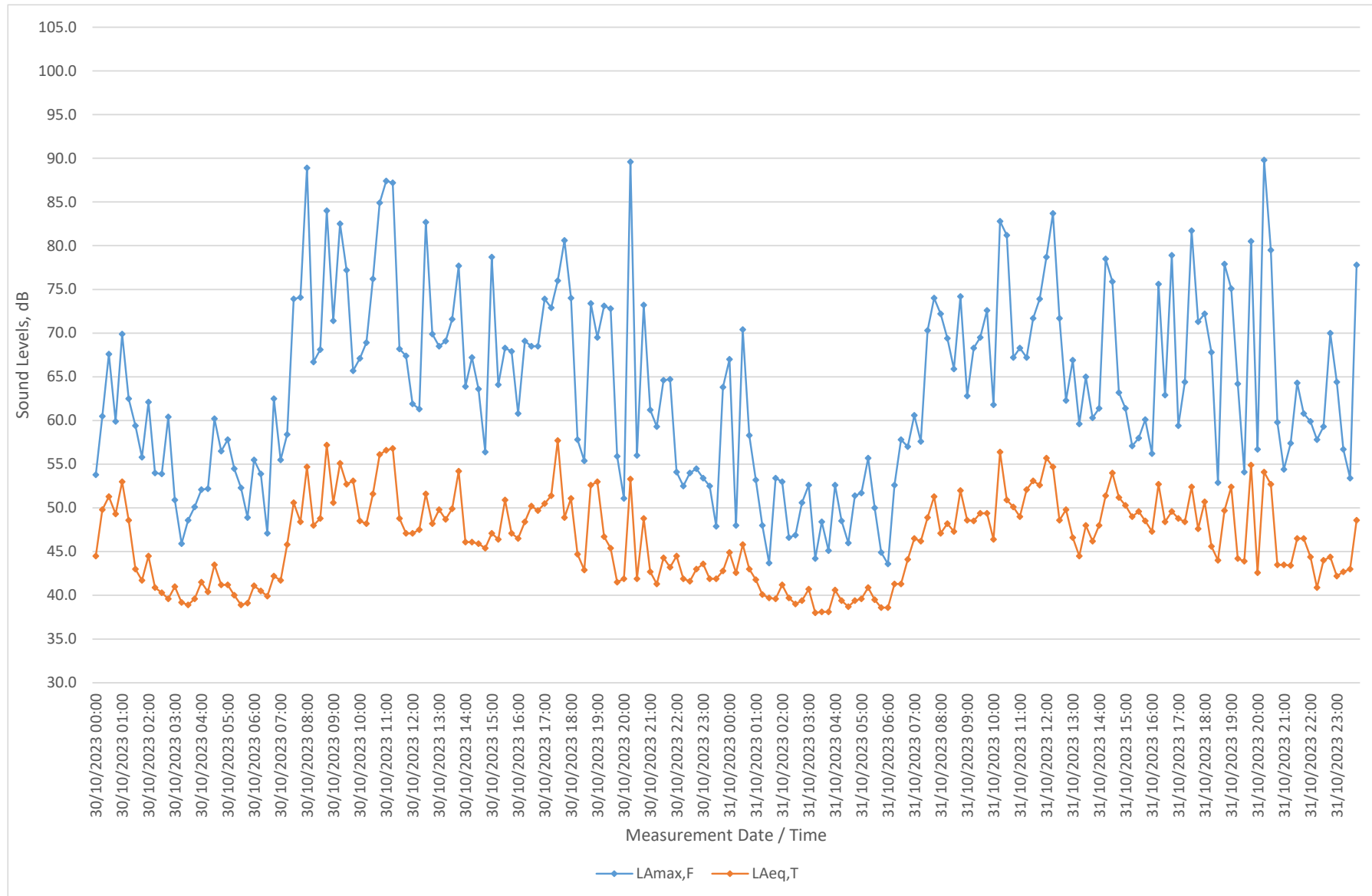


FIGURE A21: SUMMARY OF NOISE MONITORING BETWEEN 30<sup>TH</sup> OCTOBER AND 31<sup>ST</sup> OCTOBER 2023 – N1



## **APPENDIX B: EQUIPMENT DETAILS**



Monitoring Location ID	Monitoring Dates	Monitor	Serial No.	Installation Dates	Date of Last Laboratory Calibration	Unit Power
AQ1	08/09/2023 to 10/10/2023	Aeroqual	22022018-684	08/09/2023	May 2022	Mains 240v
AQ1	13/10/2023 to 10/10/2023	Aeroqual	22022018-685	13/10/2023	May 2022	Mains 240v
AQ2	10/10/2023 to 31/10/2023	Praxis/Cube	876	10/10/2023	September 2023	Mains 240v
AQ2	10/10/2023 to 31/10/2023	ES 642	U17600	10/10/2023	April 2023	Mains 240v
N1	10/10/2023 to 31/10/2023	Svan 307A	133476	10/10/2023	October 2023	Mains 240v

**TABLE B1: DETAILS OF MONITORING EQUIPMENT**



## **APPENDIX C: WEATHER DATA**

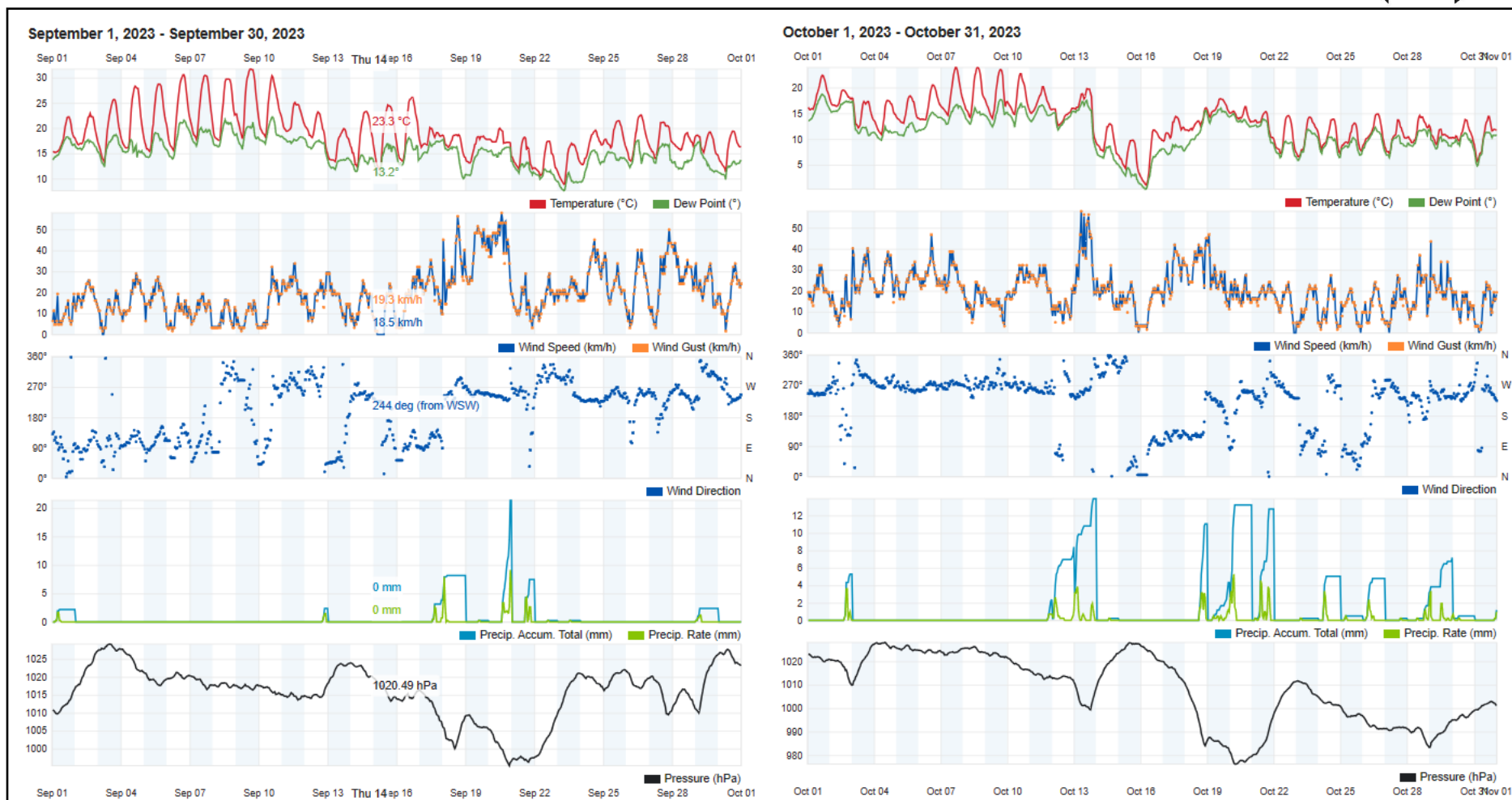


FIGURE C1: WEATHER DATA DURING MONTIORING PERIOD