

Bloomfield Colliery
Quarterly Noise Monitoring and Compliance Assessment
Quarter 1 2018

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Bloomfield Collieries
Four Mile Creek Road
Ashtonfield NSW 2323

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Quarterly Noise Monitoring and Compliance Assessment

Quarter 1 2018

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DOCUMENT CONTROL

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1 INTRODUCTION

1.1 Background

Bloomfield Collieries Pty Ltd (Bloomfield) has commissioned SLR Consulting Australia Pty Ltd (SLR) to conduct daytime, evening and night-time noise monitoring for the Bloomfield Colliery in accordance with the Project Approval requirements set by the Department of Planning and Environment (DP&E). This noise monitoring has been conducted in conjunction with the March 2018 quarterly monitoring for Abel and Donaldson Coal Mines (refer SLR Report Q69 630.01053-R1).

1.2 Objectives of this Report

The objectives of the noise monitoring survey for this quarter were as follows:

- Measure the ambient noise levels at five noise sensitive locations surrounding the colliery during the daytime, evening and night-time period. Noise surveys comprising of both unattended, continuous noise monitoring and operator attended monitoring were conducted.
- Qualify all sources of noise within each of the attended surveys, including estimated contribution or maximum level of the individual noise sources.
- Assess the noise emissions of Bloomfield Colliery and determine compliance with respect to the Consent Conditions contained in the Project Approval.

1.3 Acoustic Terminology

The following report uses specialist acoustic terminology. An explanation of common terms is provided in **Appendix A**.

2 PROJECT APPROVAL AND CONSENT CONDITIONS

Bloomfield Colliery Project Approval 07_0087

Project Approval was granted on 3 September 2009 for the Bloomfield Project (PA 07_0087). On 16 May 2011, the approval was granted for a modification to the Approval in accordance with Section 75W of the Environmental Planning and Assessment Act 1979.

Approved Operations

PA 07_0087 allows Bloomfield to:

- Extract up to 1.3 Million tonnes per annum (Mtpa) of run-of-mine (ROM) coal for 12 years.
- Transport this coal to the existing Bloomfield Coal Handling and Preparation Plant (CHPP).
- Progressively rehabilitate the site.

The 2011 modified approval subsequently allows Bloomfield to:

- Relocate the mine's power supply infrastructure.
- Establish a new haul road.
- Manage the mine's out-of-pit overburden emplacement requirements and improve on-site rehabilitation outcomes.

It is noted that the Bloomfield CHPP is consented under the Abel Coal Mine Project Approval.

Consent Conditions

The relevant conditions relating to noise from the PA 07_0087 are reproduced below.

Schedule 3 NOISE

Noise Impact Assessment Criteria

The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in **Table 1**.

Table 1 Operator Noise Impact Assessment Criteria

Morning Shoulder	Day	Evening	Night	Location and Locality	
<i>L_{Aeq}(15min)</i>	<i>L_{Aeq}(15min)</i>	<i>L_{Aeq}(15min)</i>	<i>L_{Aeq}(15min)</i>	<i>L_{A1}(1min)</i>	
40	35	35	35	45	E Browns Road, Black Hill
42	35	35	35	45	F Black Hill Road, Black Hill
43	39	42	37	45	G Buchanan Road, Buchanan
35	35	35	35	45	H Mt Vincent Road, Louth Park
35	35	35	35	45	L Kilshanny Avenue, Ashtonfield
48	39	39	37	46	M John Renshaw Drive, Buttai
43	42	42	35	46	N Lings Road, Buttai

Notes

- To interpret the locations in Table 1, see Appendix 2.
- The limits in Table 1 are to apply under meteorological conditions of up to 3 m/s at 10 m above ground level, excluding F and G class inversions as described in the NSW Industrial Noise Policy.

However, if the Proponent has a written negotiated noise agreement with the landowner of any land, and a copy of this agreement has been forwarded to the Department and DECC, then the Proponent may exceed the noise limits in Table 1 on that land in accordance with the negotiated noise agreement.

Cumulative Noise Criteria

2. The Proponent shall take all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines does not exceed the following amenity criteria at any residence on, or on more than 25 percent of, any privately owned land:

- *L_{Aeq}*(11 hour) 50 dB(A) – Day;
- *L_{Aeq}*(4 hour) 45 dB(A) – Evening; and
- *L_{Aeq}*(9 hour) 40 dB(A) – Night.

Continuous Improvement

3. The Proponent shall:

- implement all reasonable and feasible noise mitigation measures;
- investigate ways to reduce the noise generated by the project; and

(c) report on these investigations and the implementation and effectiveness of these measures in the AEMR, to the satisfaction of the Director-General.

Monitoring

4. The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General.

The Program must:

(a) be prepared in consultation with DECC and be submitted to the Director-General for approval within 6 months of the date of this approval; and

(b) include:

- a combination of unattended and attended monitoring measures; and
- a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval.

Statement of Commitments

11. Noise Management and Monitoring

A Noise Management Plan shall be prepared and implemented for the project. The Plan will include mitigation and monitoring requirements for the project.

3 NOISE MONITORING METHODOLOGY

3.1 General Requirements

The operational noise monitoring program was conducted with reference to PA 07_0087, and in accordance with SLR Report 630.01573-R3v4.1 dated 9 November 2017 (*Bloomfield Coal Project Noise Monitoring Program*) and AS 1055:1997 *Acoustics - Description and Measurement of Environmental Noise*.

3.2 Monitoring Locations

Significant noise modelling and monitoring has been conducted for the seven locations identified within Table 1 of the consent conditions. With the experience of this previous work, five noise monitoring locations have been identified to represent the potentially most affected receivers of noise emissions from Bloomfield Colliery operations. The details of the monitoring locations are given in **Table 2**.

Table 2 Noise Monitoring Locations

Noise Monitoring Location	Description
F	Lot 684 Black Hill Road, Black Hill
G	156 Buchanan Road, Buchanan
L	Kilshanny Avenue, Ashtonfield
M	John Renshaw Drive, Buttai
N	Lings Road, Buttai

A site map identifying the assessment and noise monitoring locations is presented in **Appendix B**.

3.3 Unattended Continuous Noise Monitoring

An environmental noise logger was deployed for a minimum of a seven day period between 23 March 2018 and 3 April 2018 at each of the five nominated locations given in

Table 2. All unattended monitoring equipment was programmed to continuously record statistical noise level indices in 15 minute intervals including the L_{Amax}, L_{A1}, L_{A10}, L_{A90}, L_{A99}, L_{Amin} and L_{Aeq}. The statistical noise exceedance levels (LAN) are the levels exceeded for N% of the 15 minute interval. The L_{A90} represents the level exceeded for 90% of the interval period and is referred to as the average minimum or background noise level. The L_{A10} is the level exceeded for 10% of the time and is usually referred to as the average maximum noise level. The L_{Aeq} is the equivalent continuous sound pressure level and represents the steady sound level which is equal in energy to the fluctuating level over the interval period. The L_{Amax} is the maximum noise level recorded over the interval.

Instrument calibration was conducted before and after each measurement survey, with the variation in calibrated levels not exceeding ± 0.5 dB.

3.4 Operator Attended Noise Monitoring

Operator attended noise surveys were conducted at each of the five noise monitoring locations during the day, evening and night-time periods to identify and quantify sources of noise that contributed to the overall ambient noise level. The measurements were conducted over a 15 minute period using an integrating sound level meter.

4 OPERATOR ATTENDED NOISE MONITORING

4.1 Equipment Location

The locations and details of the plant operating on the Bloomfield open cut mine during the operator attended noise monitoring period are shown in **Table 3** and **Figure 1**.

Table 3 Operations Log

Date	Plant	Work Location		
		Day Shift	Afternoon Shift	Night Shift
27/03/2018	Production	5500 (Digger)	EX01/EC111	-
		SK75 (Drill)	-	-
		SK50 (Drill)	EX03 C3	-
	Dump 1		RL-33	-
28/03/2018	Production	5500 (Digger)	EX01/EC111	
		SK75 (Drill)	-	
		SK50 (Drill)	EX03 C3	
	Dump		RL-33	

Figure 1 Bloomfield Operating Locations



Source: Bloomfield Collieries Pty Ltd 2018

4.2 Results of Operator Attended Noise Monitoring

Operator attended noise measurements were conducted commencing during the evening on Tuesday 27 March 2018 and completed during the day on Wednesday 28 March 2018. All operator attended noise surveys were conducted using a Brüel & Kjær 2270 Type 1, integrating sound level meter (s/n: 2679354).

The results of the operator attended noise measurements are given in **Table 4** to **Table 8**.

Ambient noise levels given in the tables include all noise sources such as traffic, insects, birds, and mine operations as well as any other industrial operations.

The tables provide the following information:

- Monitoring location.
- Date and start time.
- Wind velocity (m/s) and Temperature (°C) at the measurement location.
- Typical maximum (L_{Amax}) and contributed noise levels.

Mine contributions listed in the tables are from Bloomfield Colliery and are stated only when a contribution could be quantified.

Table 4 Location F, Lot 684 Black Hill Road, Black Hill

Period ¹	Date/Start Time/ Weather	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emissions and Typical Maximum Noise Levels (LAmax - dBA)
		LAmix	LA1	LA10	LA90	LAeq	
Day	28/03/2018 10:40 °C Calm 0/8 Cloud Cover	74	67	56	45	55	Road traffic 45-74 Birdsong 47 Insects 35 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Evening	27/03/2018 18:53 22°C 1 m/s SE 6/8 Cloud Cover	67	61	54	41	50	Road traffic 50-67 Insects 35 Birdsong 48 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Night	27/03/2018 22:52 19°C Calm 3/8 Cloud Cover	64	55	48	35	45	Birdsong (plover) 49 Insects/frogs 34-36 Road traffic 36-64 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm 10.00 pm; Night - 10.00 pm to 7.00 am pm Monday to Saturday, 10.00 pm to 8.00 am Sunday.

Table 5 Location G, Buchanan Road, Buchanan

Period ¹	Date/Start Time/ Weather	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emissions and Typical Maximum Noise Levels (LAmax - dBA)
		LAmix	LA1	LA10	LA90	LAeq	
Day	28/03/2018 11:44 22°C 1 m/s W 0/8 Cloud Cover	58	53	51	44	50	Insects 51-52 Traffic 48 Birdsong 47-58
		Estimated Bloomfield Colliery Noise Contribution 					

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm 10.00 pm; Night - 10.00 pm to 7.00 am pm Monday to Saturday, 10.00 pm to 8.00 am Sunday.

Table 6 Location L, 17 Kilshanny Ave, Ashtonfield

Period ¹	Date/Start Time/ Weather	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emissions and Typical Maximum Noise Levels (LAmax - dBA)
		LAmix	LA1	LA10	LA90	LAeq	
Day	28/03/2018 12:13 22°C 1 m/s WNW 0/8 Cloud Cover	73	68	52	32	53	Lawnmower 32-35 Birdsong 38-47 Traffic 40-73 Residential noise 48-54 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Evening	27/03/2018 20:26 21°C 0.5 m/s ESE 6/8 Cloud Cover	67	61	43	38	47	Traffic 30-67 Insects 38-42 Residential noise 43-46 Other Industry 28-32 (CHPP stockpile Area) Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Night	28/03/2018 00:27 17°C 1 m/s E 2/8 Cloud Cover	60	45	44	38	42	Traffic 60 Dog barking 45-48 Train 41-44 Insects 41-43 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm 10.00 pm; Night - 10.00 pm to 7.00 am pm Monday to Saturday, 10.00 pm to 8.00 am Sunday.

Table 7 Location M, John Renshaw Drive, Buttai

Period ¹	Date/Start Time/Weather	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emissions and Typical Maximum Noise Levels (LAmax - dBA)
		LAmix	LA1	LA10	LA90	LAeq	
Day	28/03/2018 11:00 26°C 1 m/s WSW 0/8 Cloud Cover	62	56	54	49	52	Road traffic 45-68 Insects 35 Birdsong 43-49 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Evening	27/03/2018 19:14 21°C 2 m/s ESE 5/8 Cloud Cover	60	56	54	46	51	Road traffic 45-61 Wind in trees 35 Frogs/Insects 39-44 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Night	27/03/2018 23:13 19°C 1 m/s E 2/8 Cloud Cover	66	60	54	44	51	Insects/frogs 41-45 Road traffic 40-60 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm 10.00 pm; Night - 10.00 pm to 7.00 am pm Monday to Saturday, 10.00 pm to 8.00 am Sunday.

Table 8 Location N, Lings Road, Buttai

Period ¹	Date/Start Time/Weather	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emissions and Typical Maximum Noise Levels (LAmax - dBA)
		LAmix	LA1	LA10	LA90	LAeq	
Day	28/03/2018 11:20 22°C 0.5 m/s SW 0/8 Cloud Cover	85	78	70	48	67	Birdsong 44-48 Road Traffic 50-85 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Evening	27/03/2018 19:35 21°C 1 m/s SE 4/8 Cloud Cover	80	75	66	50	63	Insects 52-56 Road traffic 46-80 Bats 56 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					
Night	27/03/2018 23:35 19°C 0.5 m/s E 3/8 Cloud Cover	77	72	60	39	58	Insects 38-44 Road traffic 35-77 Bloomfield Colliery Inaudible
		Estimated Bloomfield Colliery Noise Contribution Inaudible					

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm to 10.00 pm; Night - 10.00 pm to 7.00 am Monday to Saturday, 10.00 pm to 8.00 am Sunday.

4.3 Operator Attended Noise Monitoring Summary

4.3.1 Location F – Black Hill Road, Black Hill

Noise levels at Location F, were dominated by local traffic on Black Hill Road and distant traffic on John Renshaw Drive. Insect noise and birdsong was also a contributor at this location.

Bloomfield Colliery operations remained inaudible at this location during all operator attended noise measurements.

4.3.2 Location G – Buchanan Road, Buchanan

Insect noise and distant road traffic on Buchanan Road and John Renshaw Drive contributed to the overall ambient noise environment during the day, evening and night-time operator attended noise surveys at this location.

Bloomfield Colliery operations were barely audible during the daytime and audible during the evening noise monitoring surveys at this location and consisted of haul truck and dozer activity. Bloomfield LAeq(15minute) noise contribution was estimated to be 38 dBA during the evening monitoring survey.

4.3.3 Location L – Killshanny Avenue, Ashtonfield

Noise levels at Location L were dominated by intermittent road traffic, suburban noise as well as insects and birds.

Bloomfield Colliery operations remained inaudible at this location during all operator attended noise measurements.

4.3.4 Location M – John Renshaw Drive, Buttai

Noise levels at Location M, were dominated by distant traffic on John Renshaw Drive as well as insects and birds.

Bloomfield Colliery operations remained inaudible at this location during all operator attended noise measurements.

4.3.5 Location N – Lings Road, Buttai

Noise levels at location N were dominated by traffic noise from John Renshaw Drive and insects.

Bloomfield Colliery operations remained inaudible at this location during all operator attended noise measurements.

4.4 Compliance Assessment and Discussion of Results

4.4.1 Operations

Results of the operational noise compliance assessment are given in **Table 9**.

Table 9 Compliance Noise Assessment - Operations

Location	Estimated Bloomfield LAeq(15minute) Contribution			Consent Conditions LAeq(15minute)			Compliance		
	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
F – Black Hill Road, Black Hill	Inaudible at all times			35	35	35	Yes ¹	Yes ¹	Yes ¹
G – Buchanan Road, Buchanan	<35	38	Inaudible	39	42	37	Yes	Yes	Yes
L – Kilshanny Ave, Ashtonfield	Inaudible at all times			35	35	35	Yes	Yes	Yes
M – John Renshaw Drive, Buttai	Inaudible at all times			39	39	37	Yes	Yes	Yes
N – Lings Road, Buttai	Inaudible at all times			42	42	35	Yes	Yes	Yes

¹ – Mine-owned Property

Results presented in **Table 9** indicate that compliance with the consent conditions was achieved at all attended noise monitoring locations during all periods.

4.4.2 Sleep Disturbance

Results of the sleep disturbance compliance assessment are given in **Table 10**.

Table 10 Compliance Noise Assessment – Sleep Disturbance

Location	Estimated Bloomfield LA1(1minute) Contribution	Consent Conditions LA1(1minute)	Compliance
F – Black Hill Road, Black Hill	Inaudible	45	Yes ¹
G – Buchanan Road, Buchanan	Inaudible	45	Yes
L – Kilshanny Ave, Ashtonfield	Inaudible	45	Yes
M – John Renshaw Drive, Buttai	Inaudible	46	Yes
N – Lings Road, Buttai	Inaudible	46	Yes

1 – Mine owned Property

Results presented in **Table 10** indicate that compliance with the sleep disturbance consent conditions was achieved at all locations during the night-time noise surveys.

5 UNATTENDED CONTINUOUS NOISE MONITORING

5.1 Results of Unattended Continuous Monitoring

Unattended continuous noise monitoring was conducted between 23 March 2018 and 3 April 2018 at each of the five nominated locations given in

Table 2. Details of the noise loggers used for the unattended continuous noise monitoring are given in **Table 11**.

As Location N is predominately dominated by road traffic along John Renshaw Drive, an alternate noise logger location was selected closer to Bloomfield operations. The alternative logger location allows a Bloomfield noise contribution to be measured at this location and a Bloomfield contribution to be calculated at Location N.

Table 11 Noise Logger and Noise Monitoring Locations

Location	Noise Logger Serial Number	Date of Logging
F – Black Hill Road, Black Hill	ARL EL- 316 16-004-038	23/03/2018-03/04/2018
G – Buchanan Road, Buchanan	ARL EL- 316 16-306-039	23/03/2018-03/04/2018
L – Kilshanny Ave, Kilshanny	ARL EL- 316 16-203-525	23/03/2018-03/04/2018
M – John Renshaw Drive, Buttai	ARL EL- 316 16-207-021	23/03/2018-03/04/2018
N – Alternative Logger Location 669 John Renshaw Drive, Buttai	SVAN 957 - 27522	23/03/2018-03/04/2018

The unattended ambient noise logger data from each monitoring location have been presented graphically on a daily basis and are attached as **Appendix C**. A summary of the results of the unattended continuous noise monitoring is given in **Table 12**.

The ambient noise level data quantifies the overall noise level at a given location independent of its source or character.

The measured ambient noise levels were divided into three periods representing day, evening and night as designated in the NSW *Noise Policy for Industry* (NPfI).

Precautions were taken to minimise influences from extraneous noise sources (eg optimum placement of the loggers away from creeks, trees, houses, etc), however, not all these sources or their effects can be eliminated. This is particularly the case during the warmer times of year when noise from insects, frogs, birds and other animals can become quite prevalent.

Weather data for the subject area during the noise monitoring period was obtained from the weather station located on the Bloomfield project site. Noise data during periods of any rainfall and/or wind speeds in excess of 5 m/s (approximately 9 knots) were discarded in accordance with INP weather affected data exclusion methodology.

Table 12 Unattended Continuous Monitoring Ambient Noise Levels (dBA Re 20 µPa)

Location	Period	LA1	LA10	LA90	LAeq
F – Black Hill Road, Black Hill	Daytime	68	57	44	58
	Evening	63	54	39	53
	Night	59	51	35	52
G -156 Buchanan Road, Buchanan	Daytime	51	48	39	47
	Evening	48	45	36	44
	Night	45	41	33	42
L – Kilshanny Avenue, Ashtonfield	Daytime	60	48	31	55
	Evening	58	48	34	50
	Night	56	53	39	53
M - John Renshaw Drive, Buttai	Daytime	56	53	44	51
	Evening	57	52	41	51
	Night	55	49	36	49
N – Alternative Logger Location 669 John Renshaw Drive	Daytime	56	48	37	54
	Evening	51	44	34	54
	Night	46	41	31	50

Note 1: EPA periods used for the NPfl are defined as Daytime - 7.00 am to 6.00 pm Monday to Saturday, 8.00 am to 6.00 pm Sunday; Evening - 6.00 pm to 10.00 pm; Night - 10.00 pm to 7.00 am Monday to Saturday, 10.00 pm to 8.00 am Sunday.

5.2 Discussion

Noise levels at Location G, Location F and Location M were dominated by road traffic as well as insects, while at Location L noise levels were dominated by insects, local traffic and residential noise.

A review of data from the noise logger at the alternative logger location N reveals that noise levels at this location are heavily influenced by Bloomfield operations generating typical LAeq(15minute) noise levels of 49 dBA to 52 dBA during the day and evening operator attended noise monitoring periods. Taking into account operating locations, distance and barrier attenuation from the pit wall, likely noise levels at Location N were calculated to be 23 dBA to 26 dBA and therefore indicate compliance with the consent conditions at Location N during the noise monitoring period.

6 CONCLUSION

SLR was engaged by Bloomfield Collieries Pty Ltd to conduct operator attended and unattended noise monitoring for Bloomfield Colliery in accordance with the Project Approval requirements.

Results of noise monitoring have indicated compliance with the consent conditions at all monitoring locations during the March 2018 monitoring period.

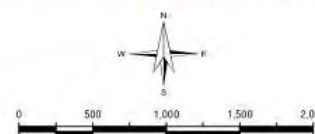


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LEGEND
 Noise Monitoring Locations



Donaldson Coal

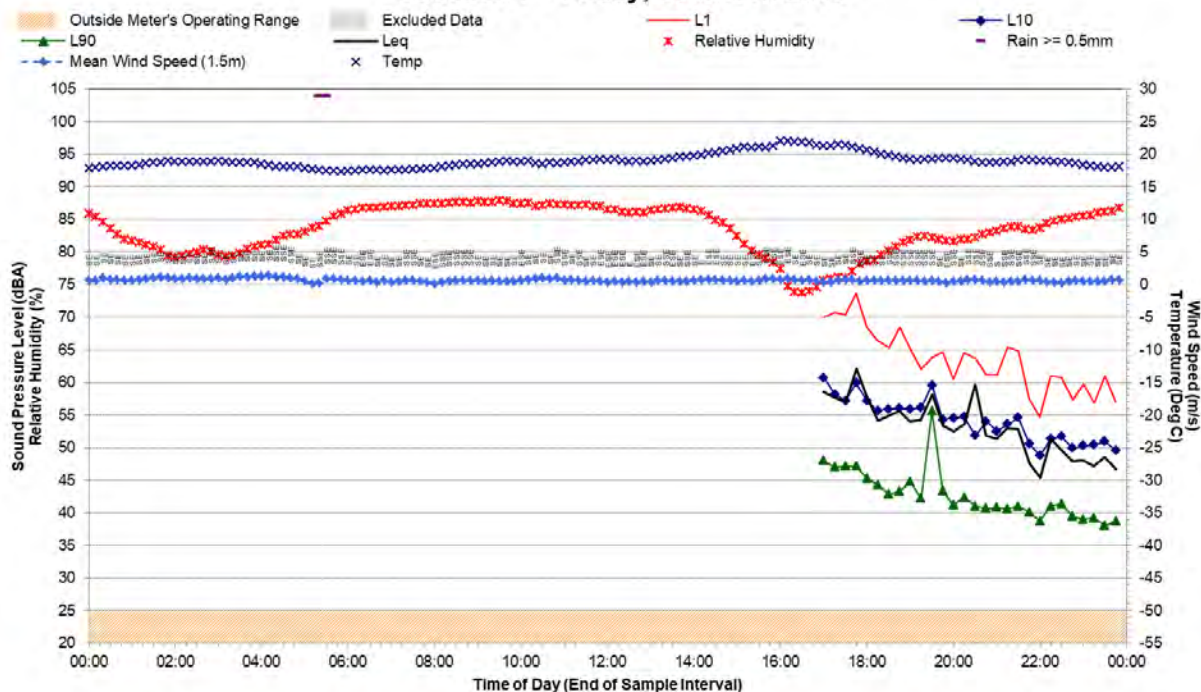
Noise Monitoring

Noise Monitoring Locations

APPENDIX A

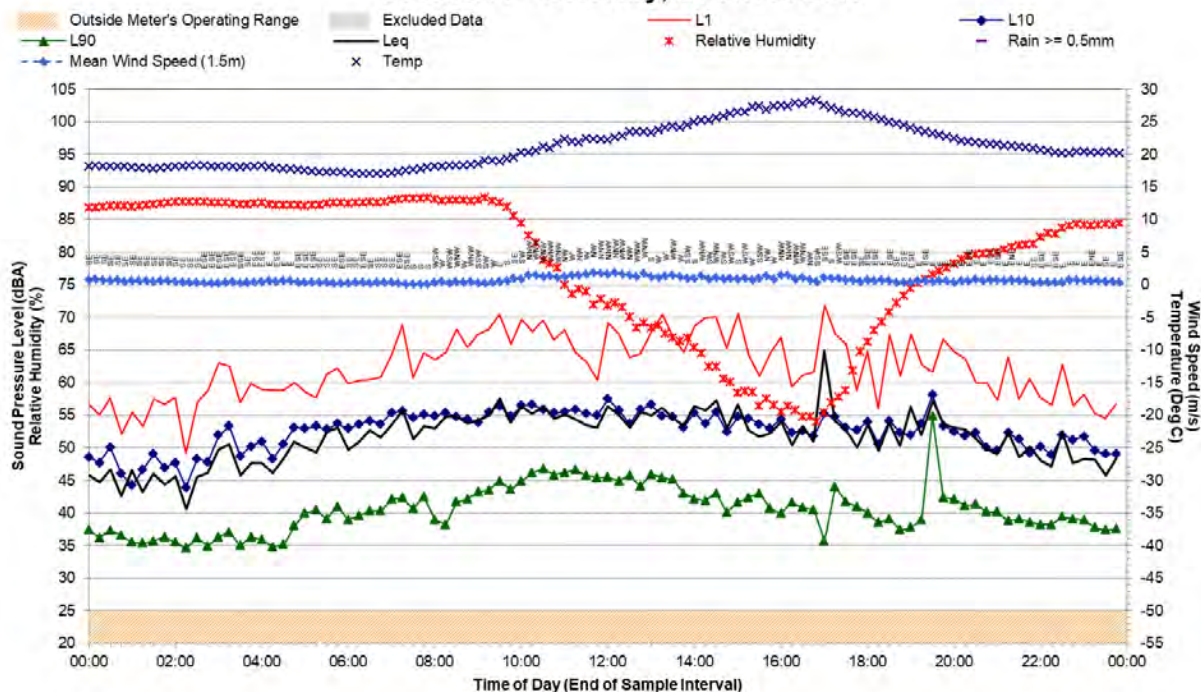
Statistical Ambient Noise Levels

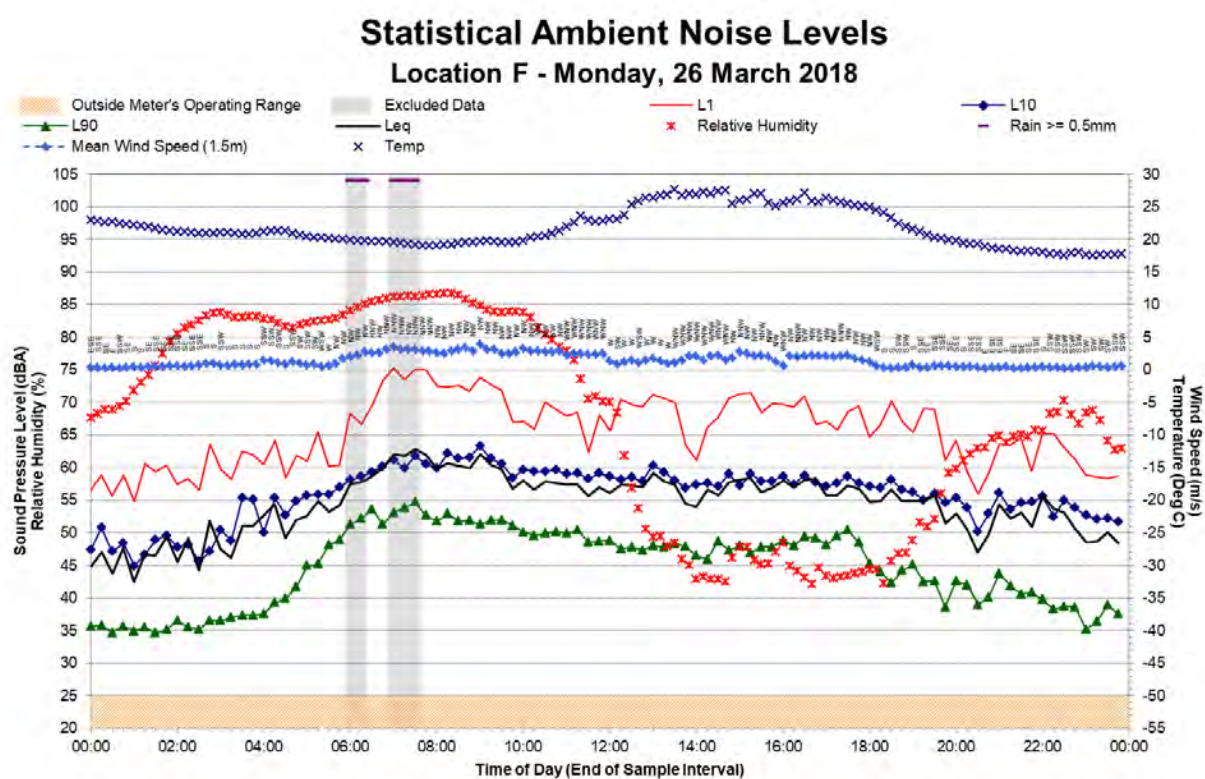
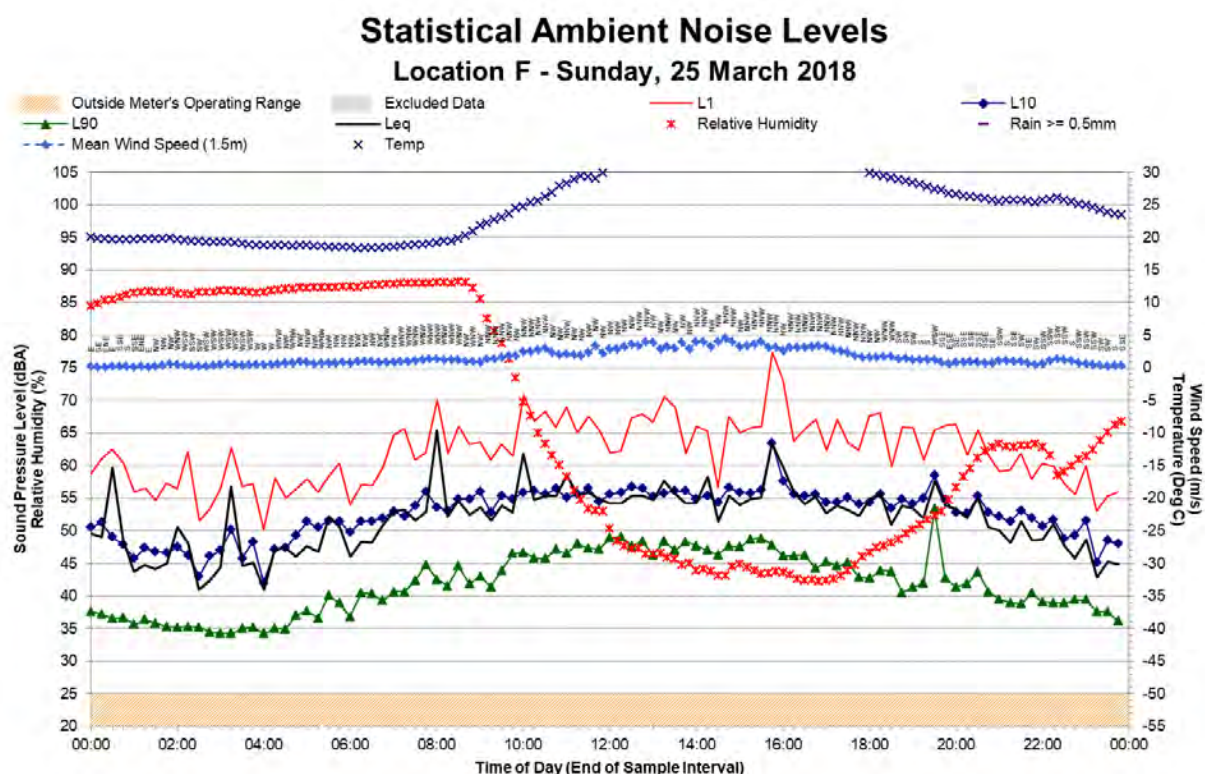
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Statistical Ambient Noise Levels

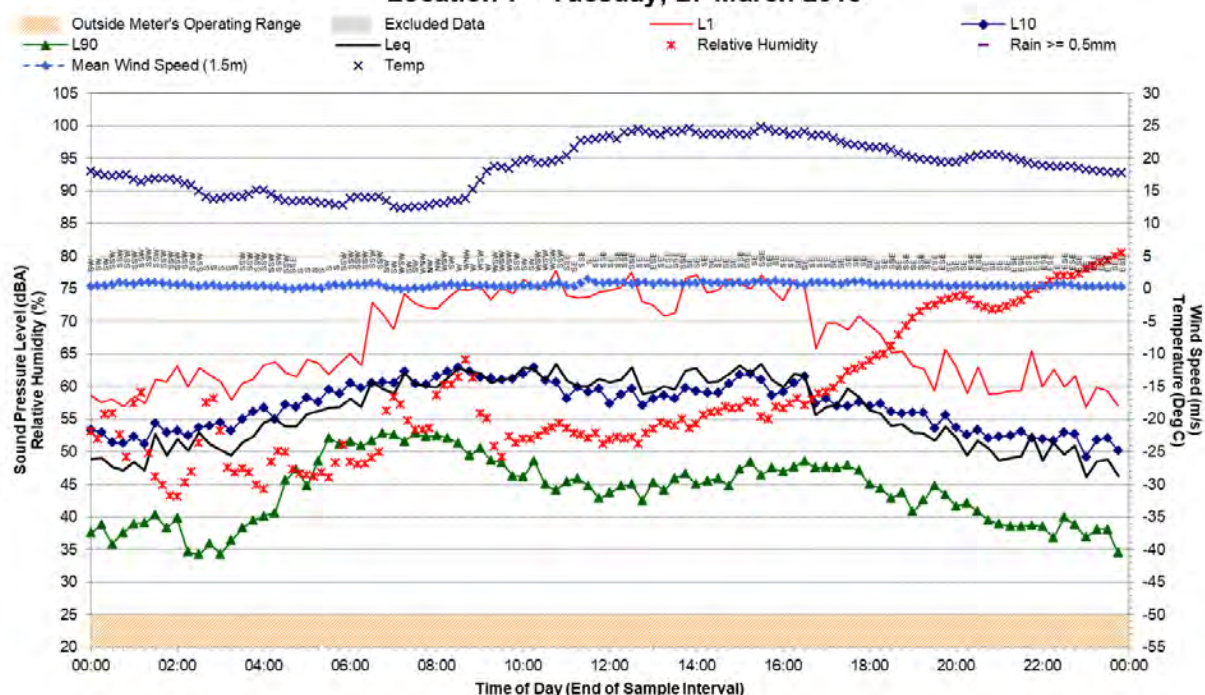
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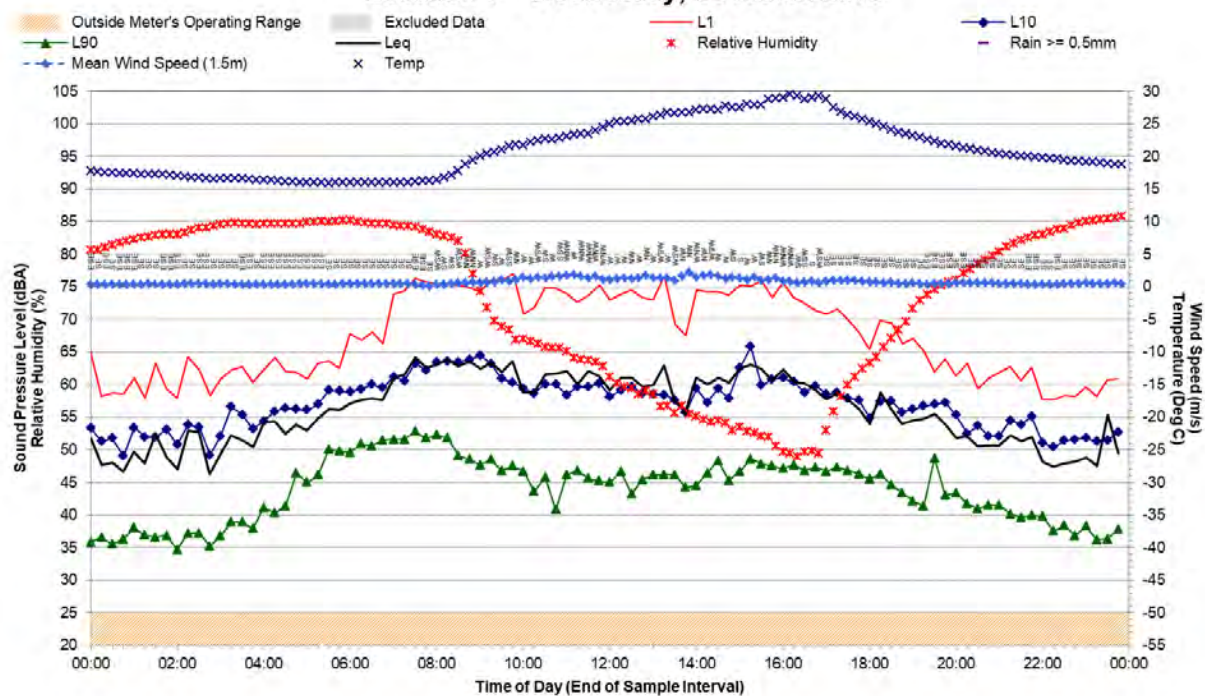
Statistical Ambient Noise Levels

Location F - Tuesday, 27 March 2018



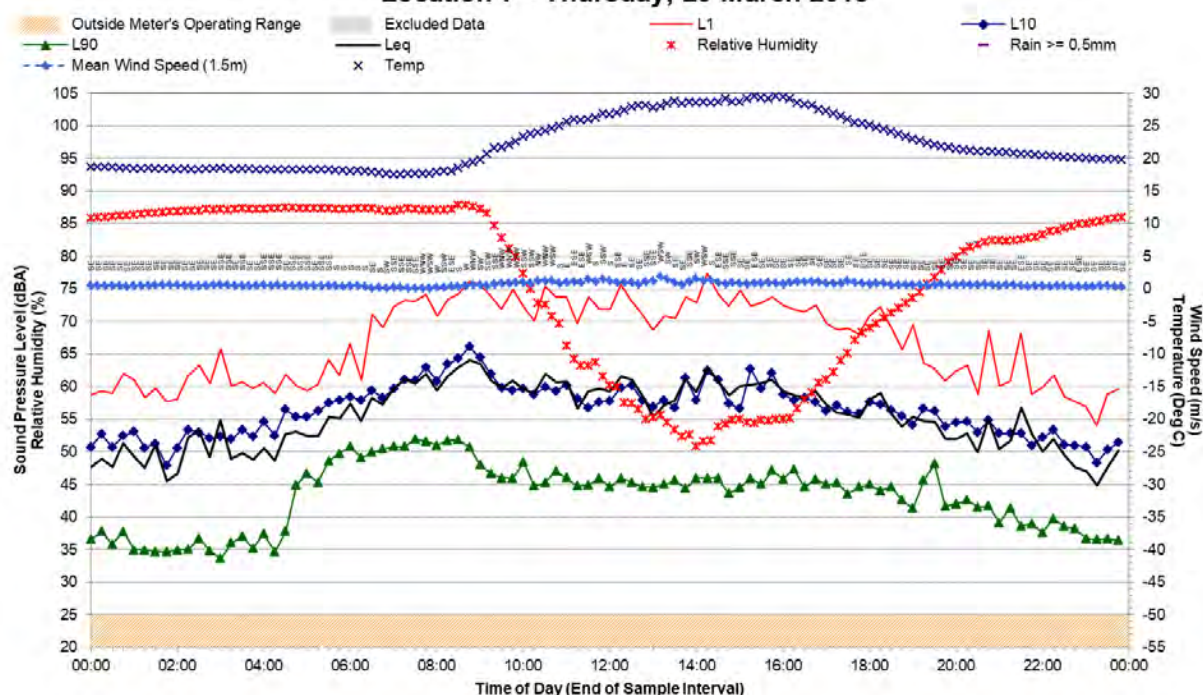
Statistical Ambient Noise Levels

Location F - Wednesday, 28 March 2018



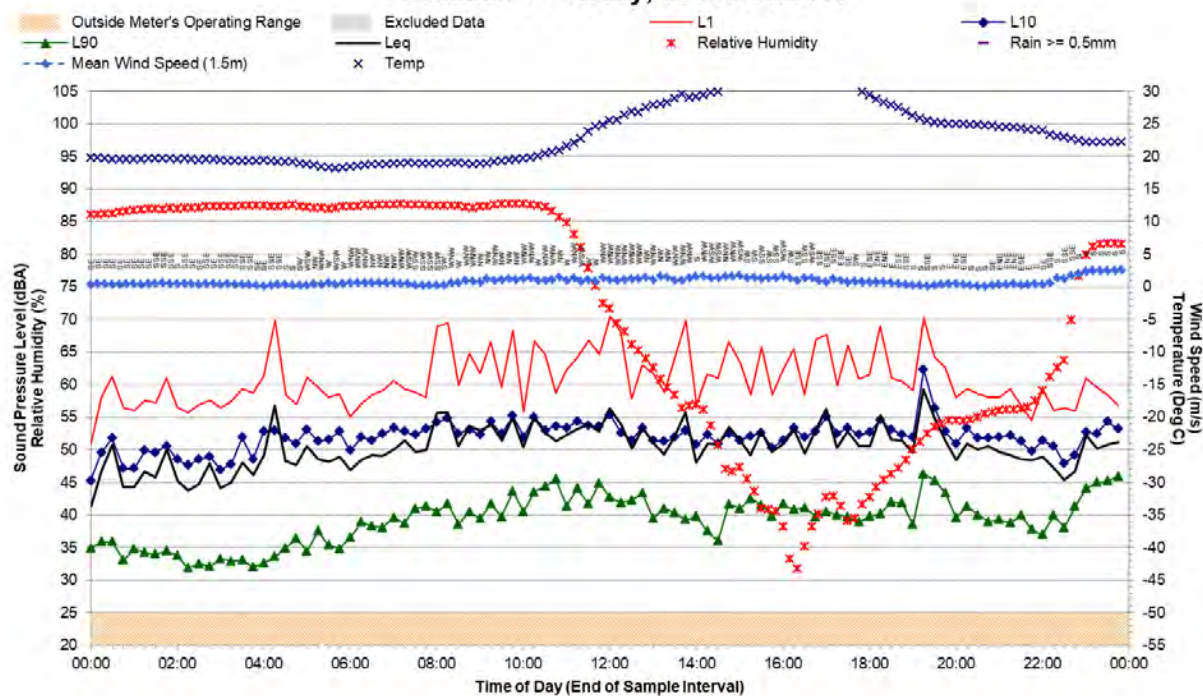
Statistical Ambient Noise Levels

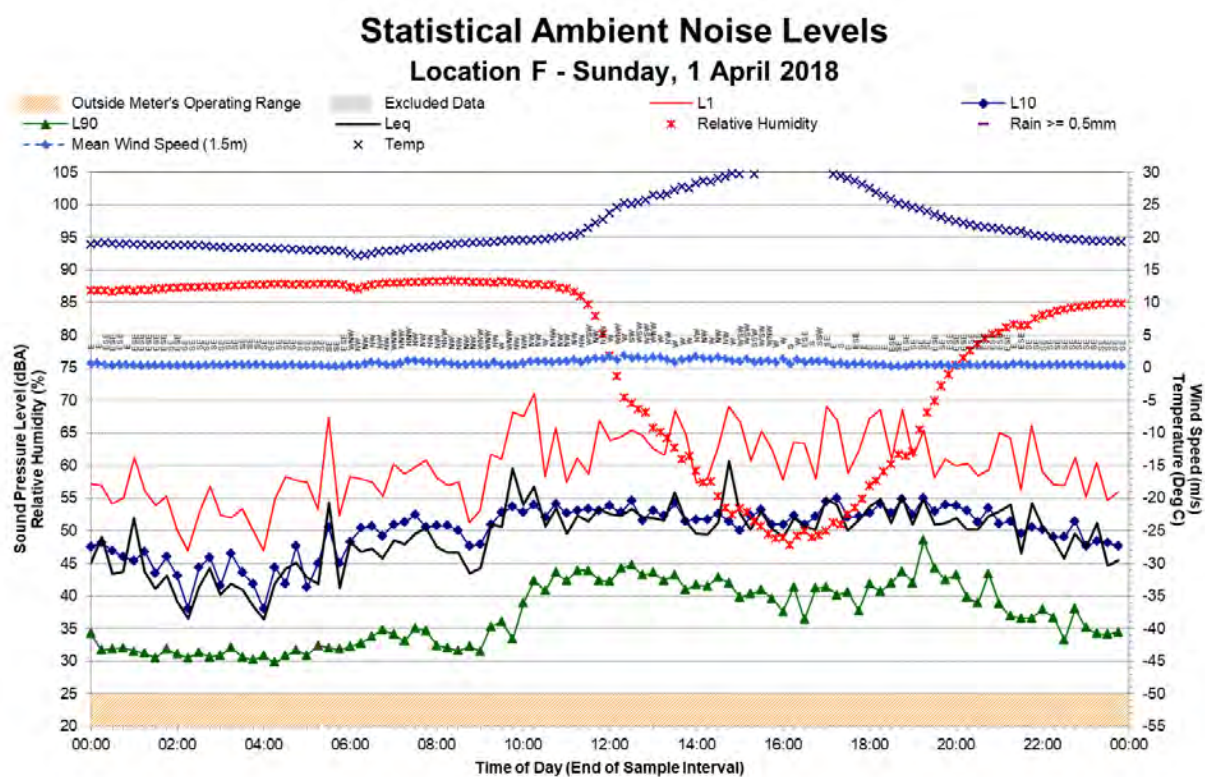
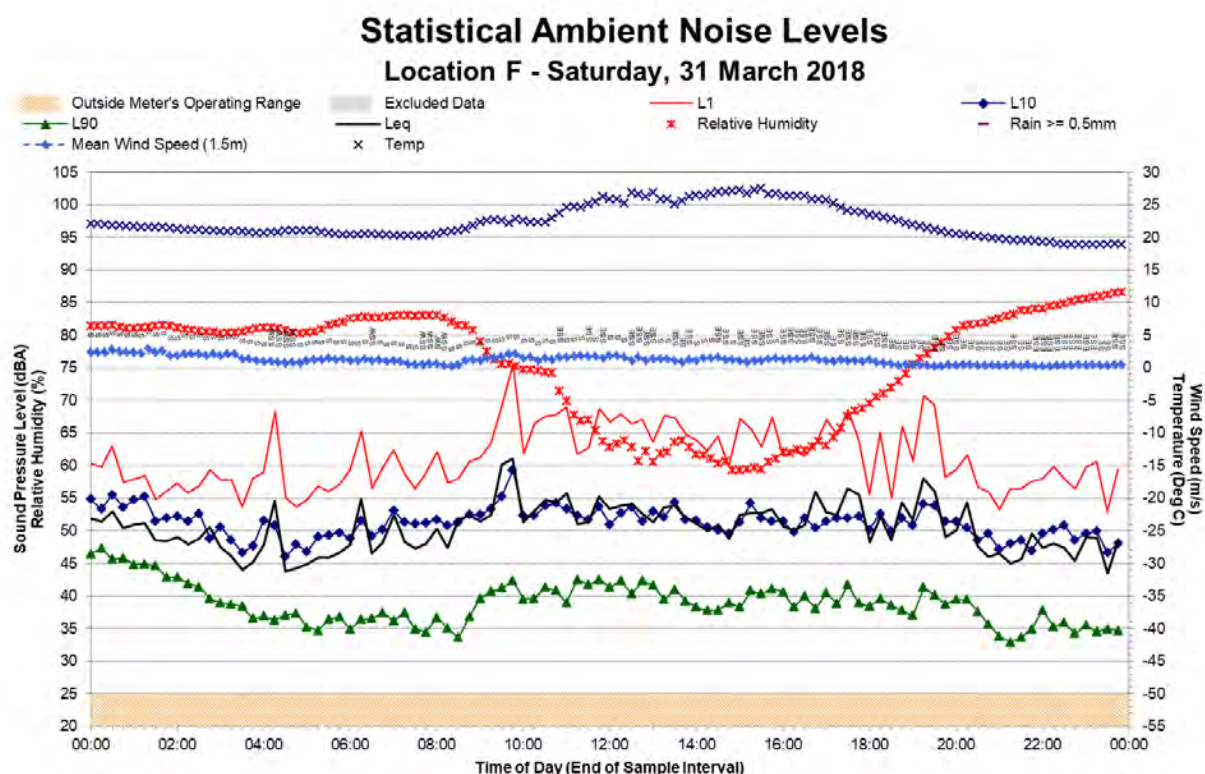
Location F - Thursday, 29 March 2018

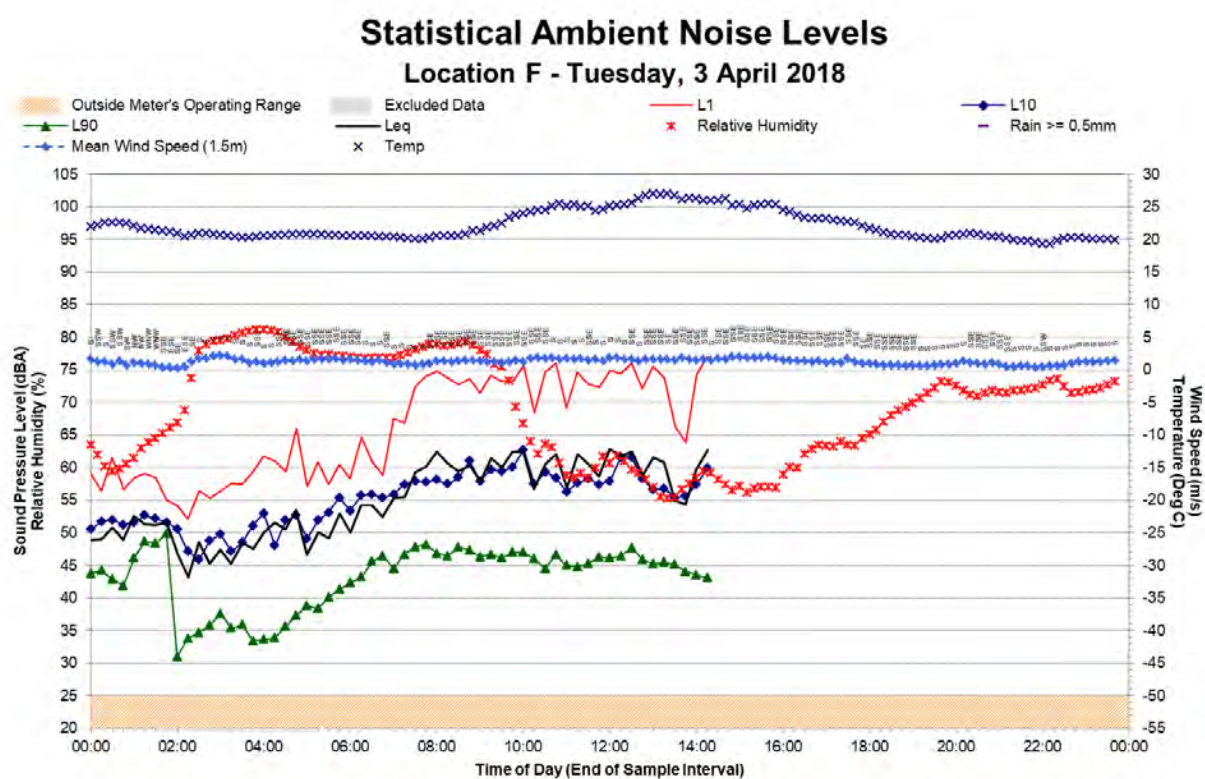
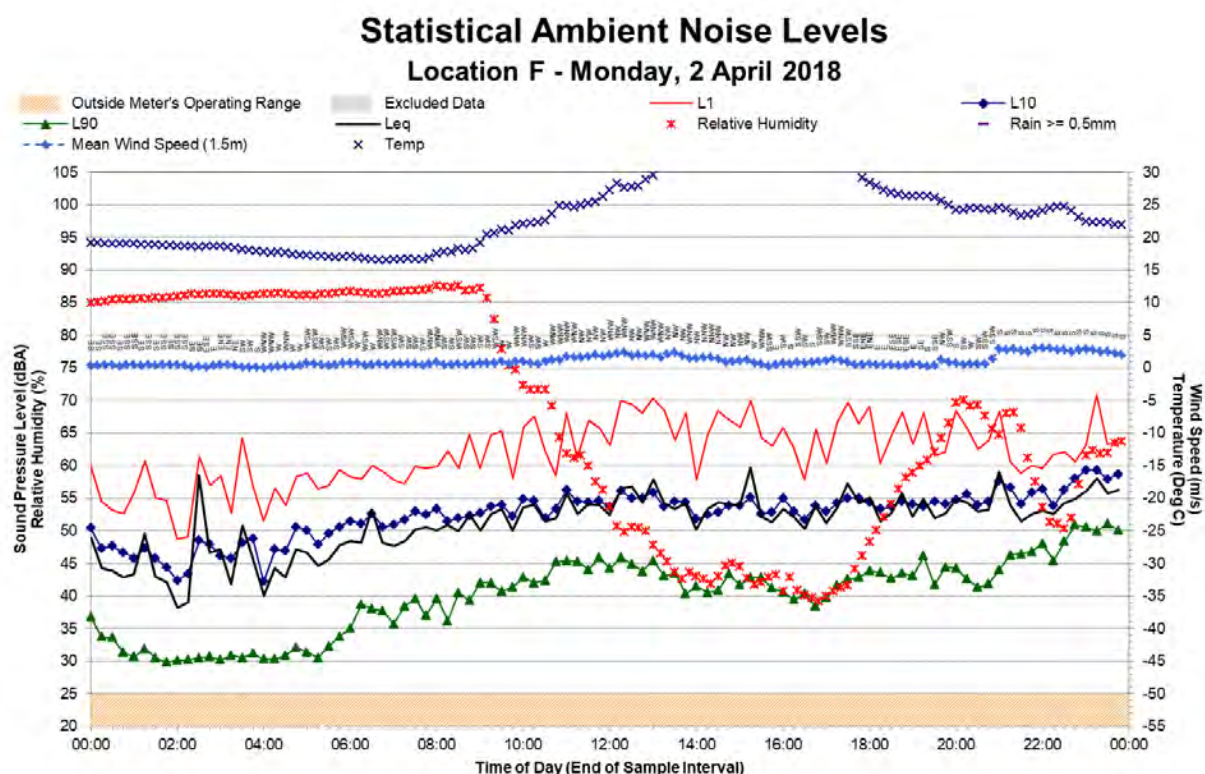


Statistical Ambient Noise Levels

Location F - Friday, 30 March 2018

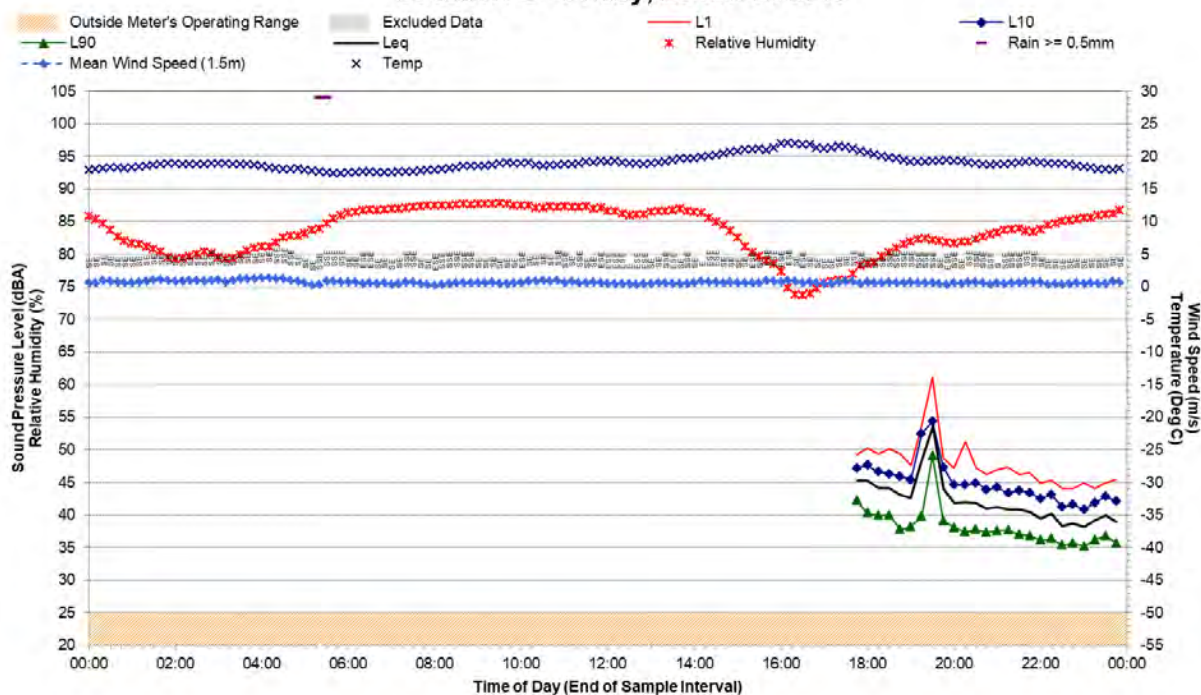






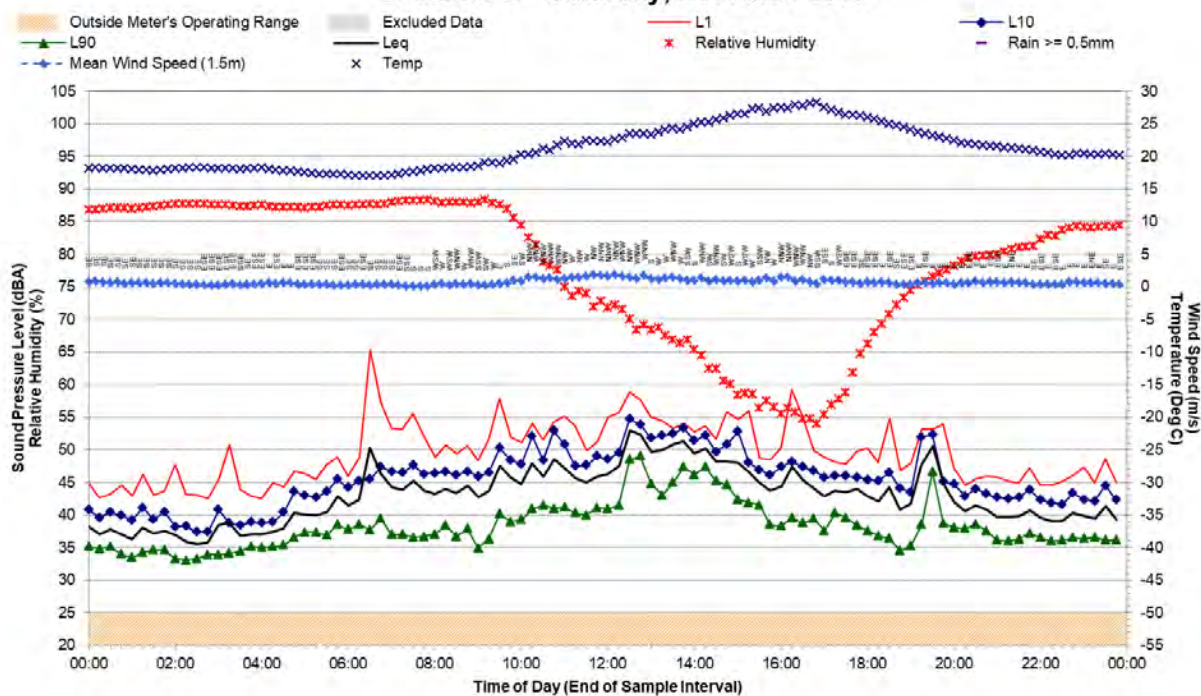
Statistical Ambient Noise Levels

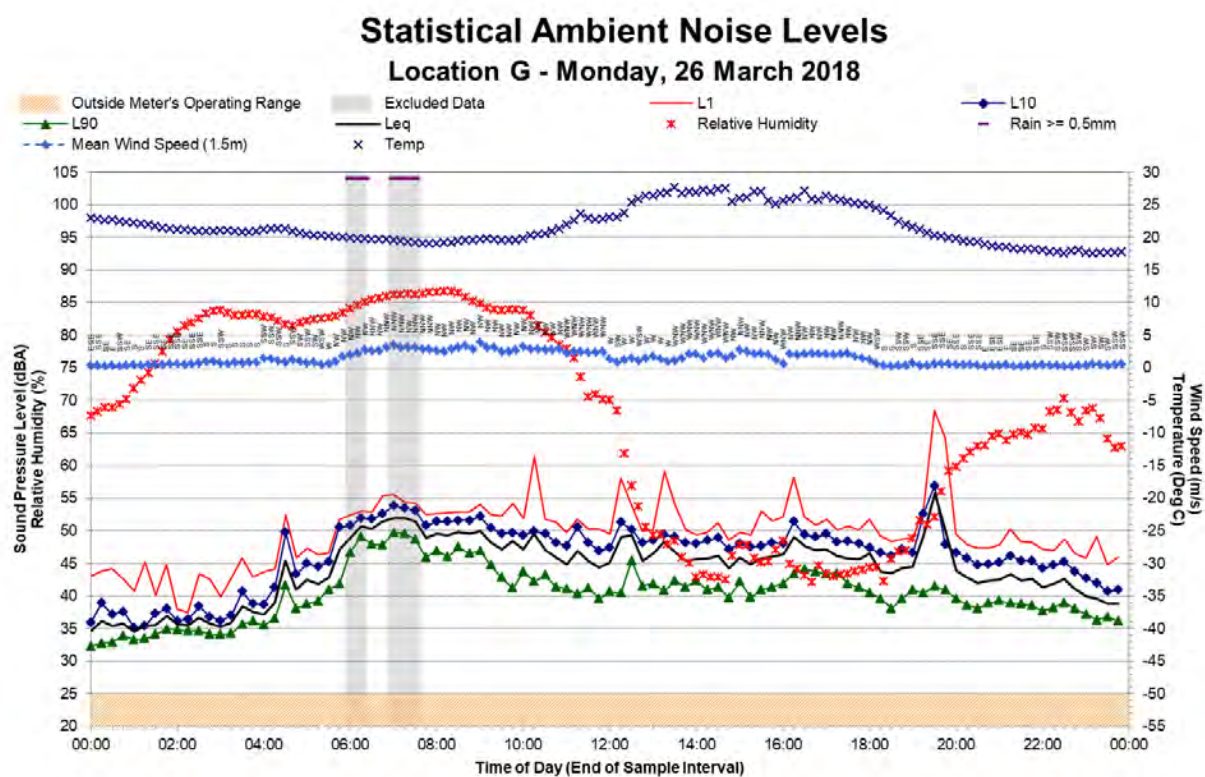
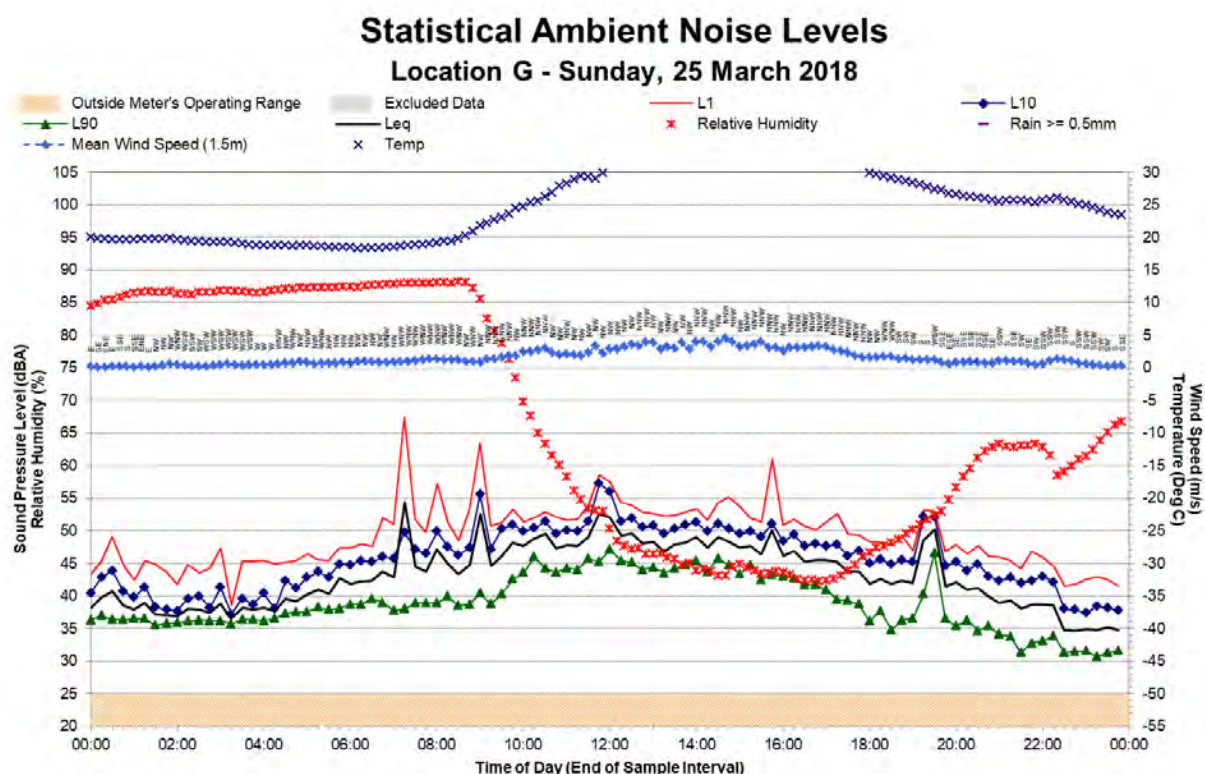
Location G - Friday, 23 March 2018



Statistical Ambient Noise Levels

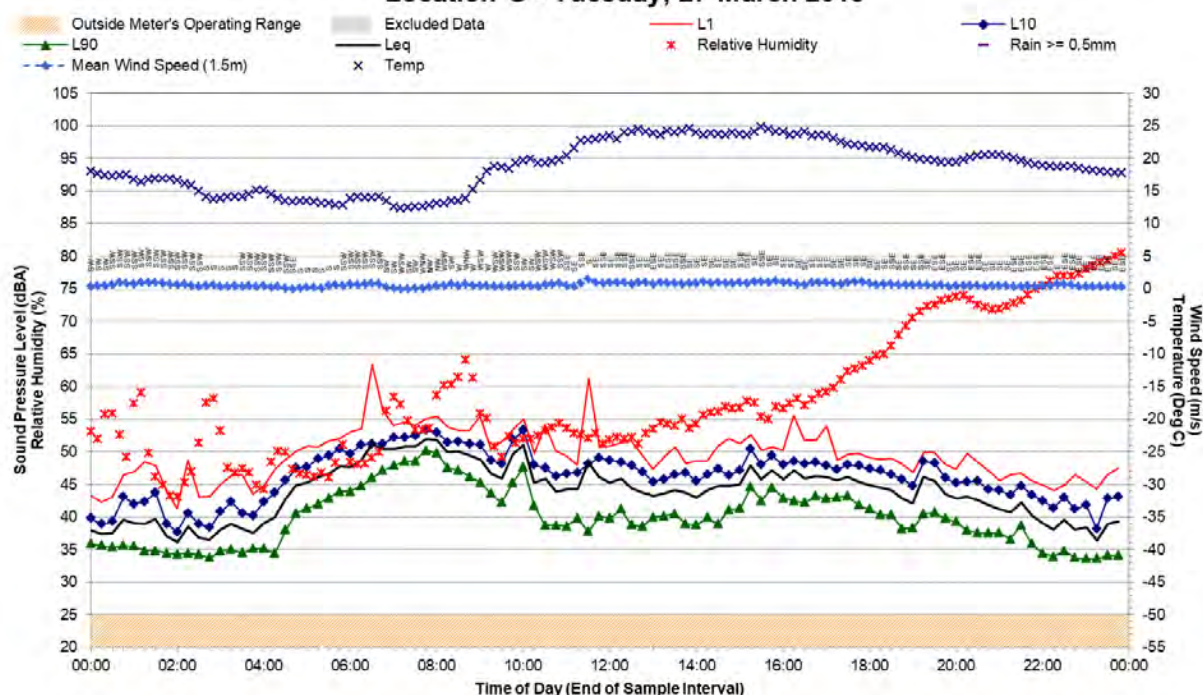
Location G - Saturday, 24 March 2018





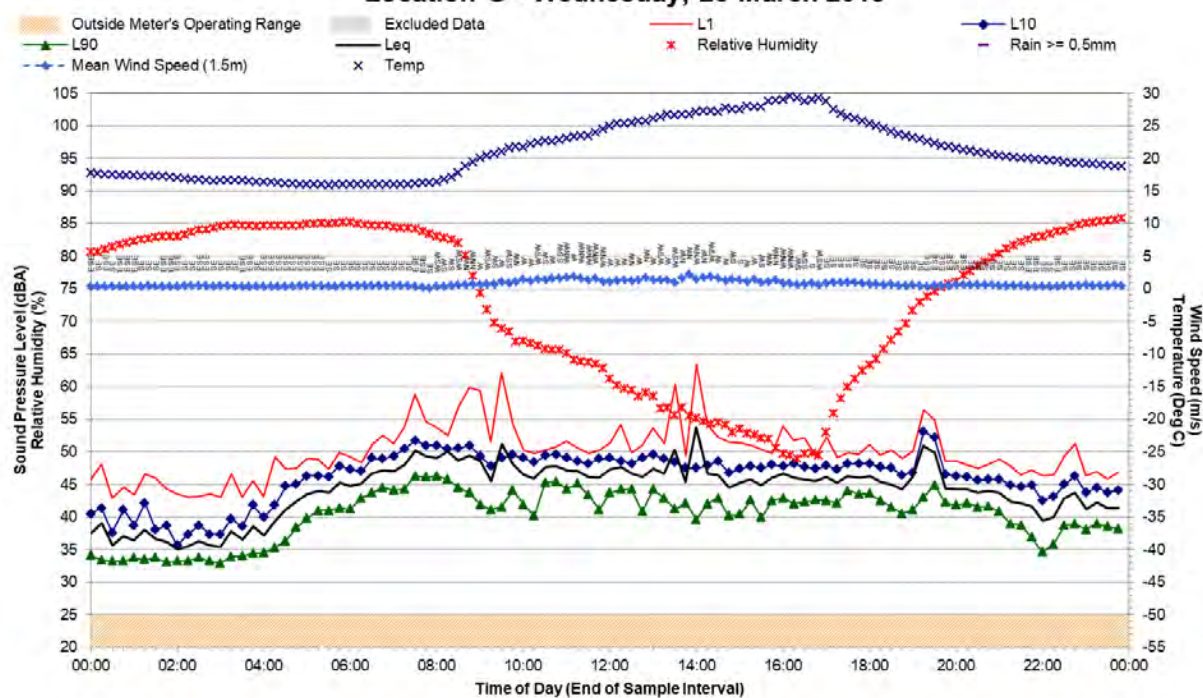
Statistical Ambient Noise Levels

Location G - Tuesday, 27 March 2018



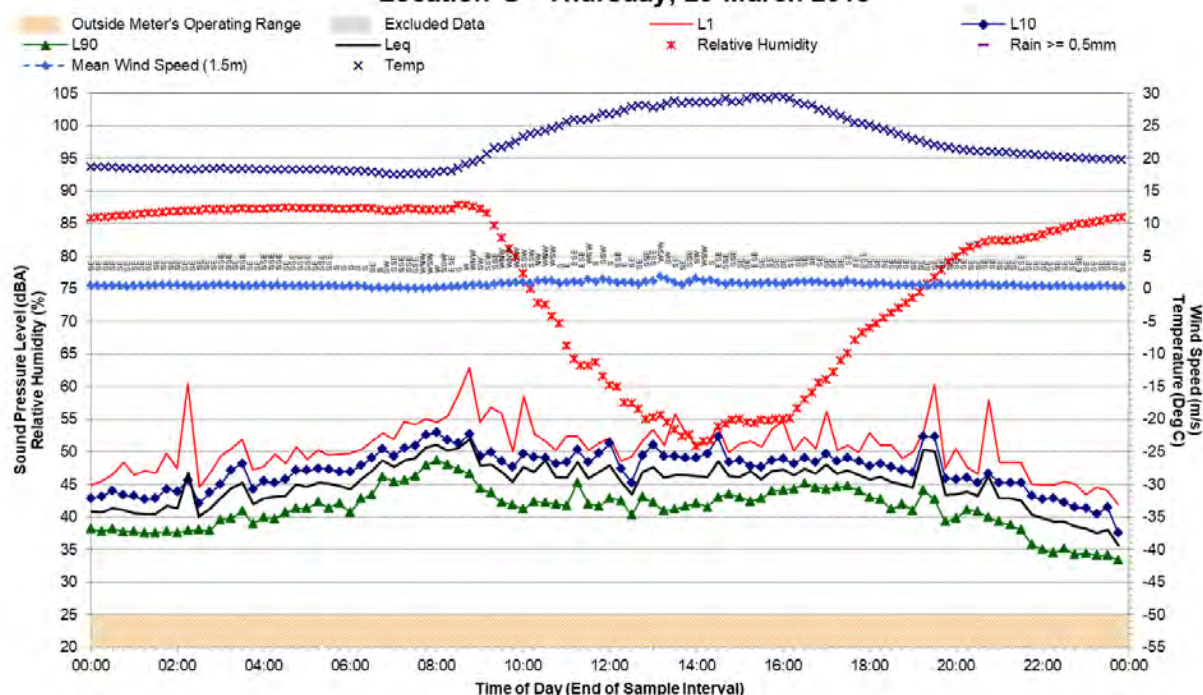
Statistical Ambient Noise Levels

Location G - Wednesday, 28 March 2018



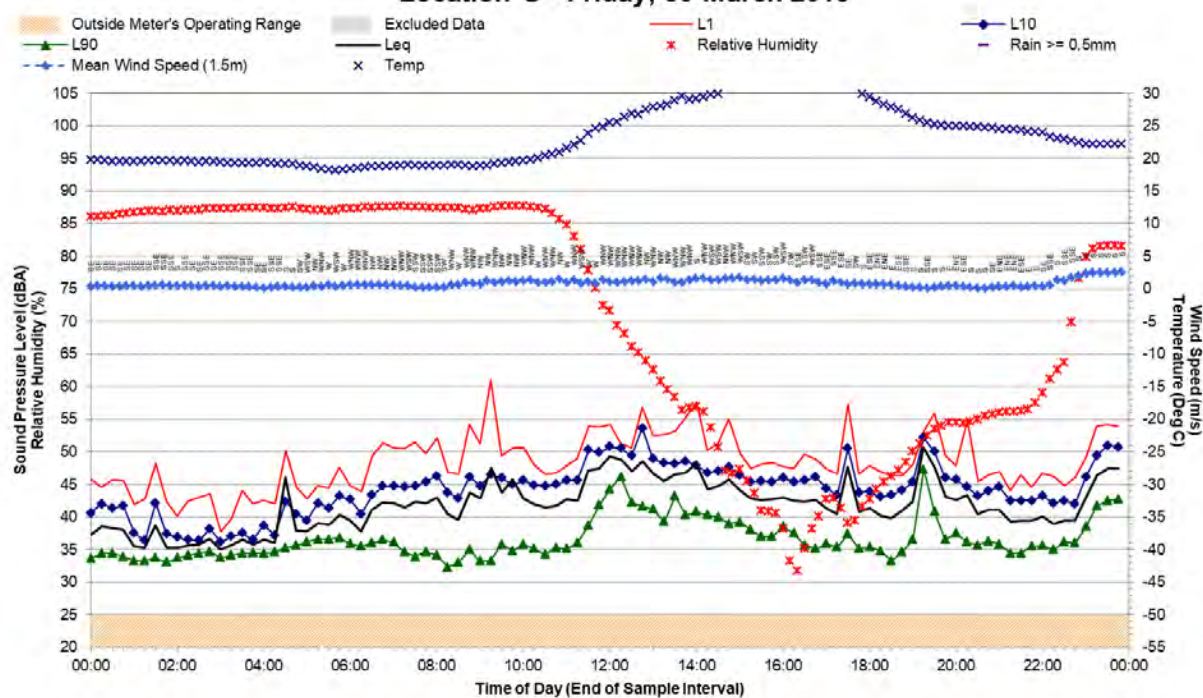
Statistical Ambient Noise Levels

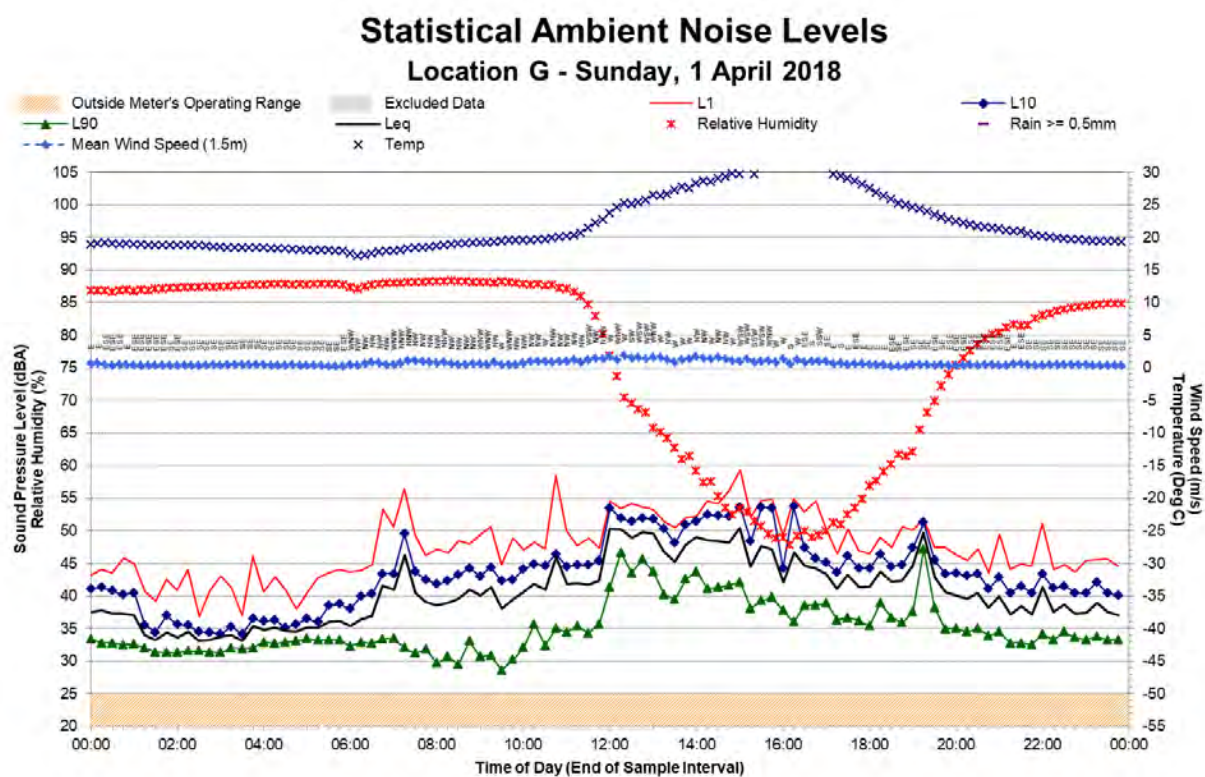
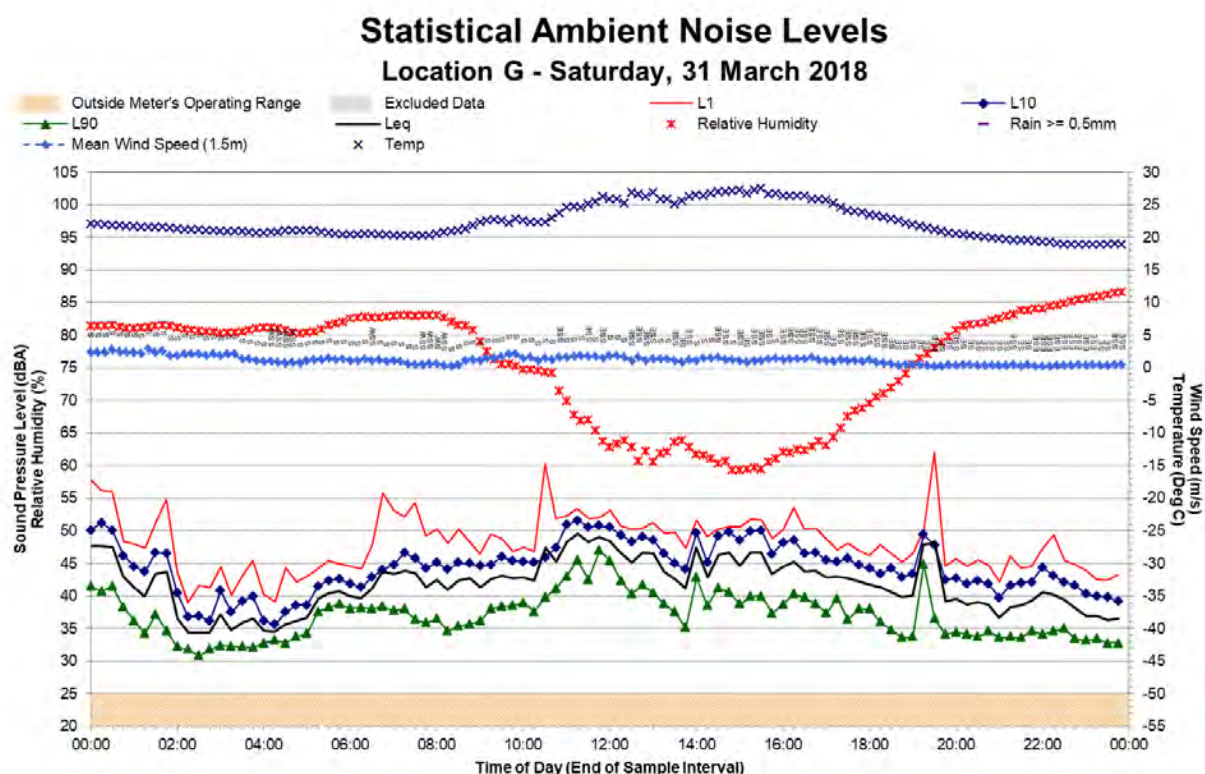
Location G - Thursday, 29 March 2018



Statistical Ambient Noise Levels

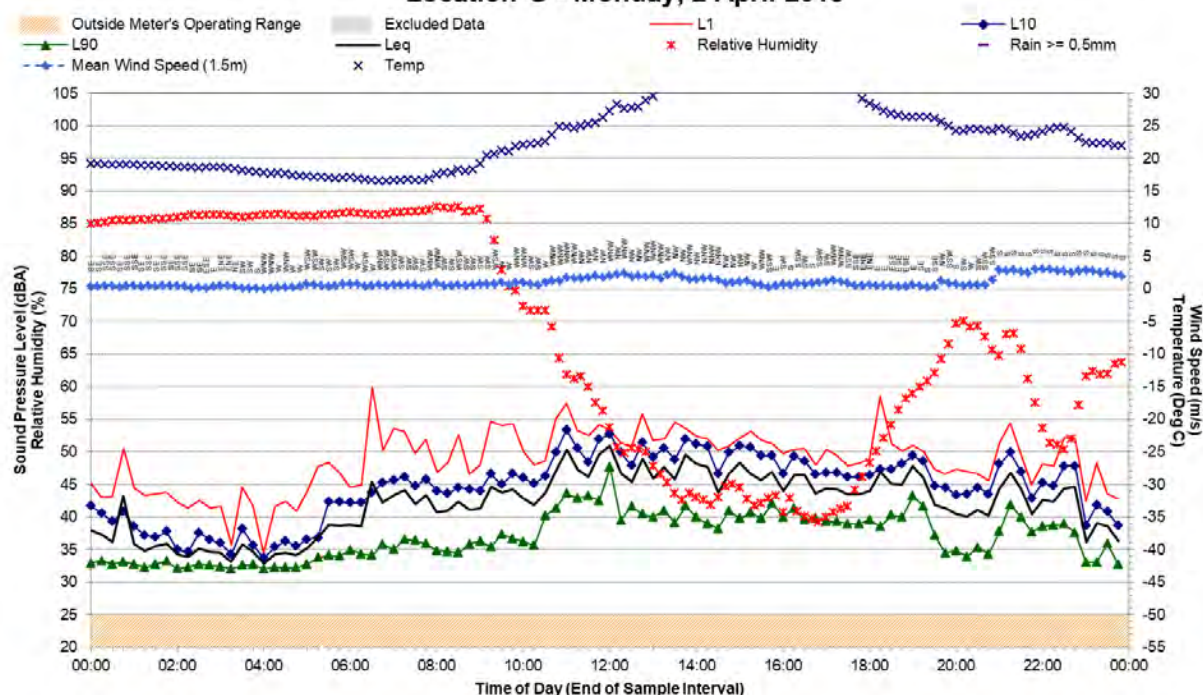
Location G - Friday, 30 March 2018





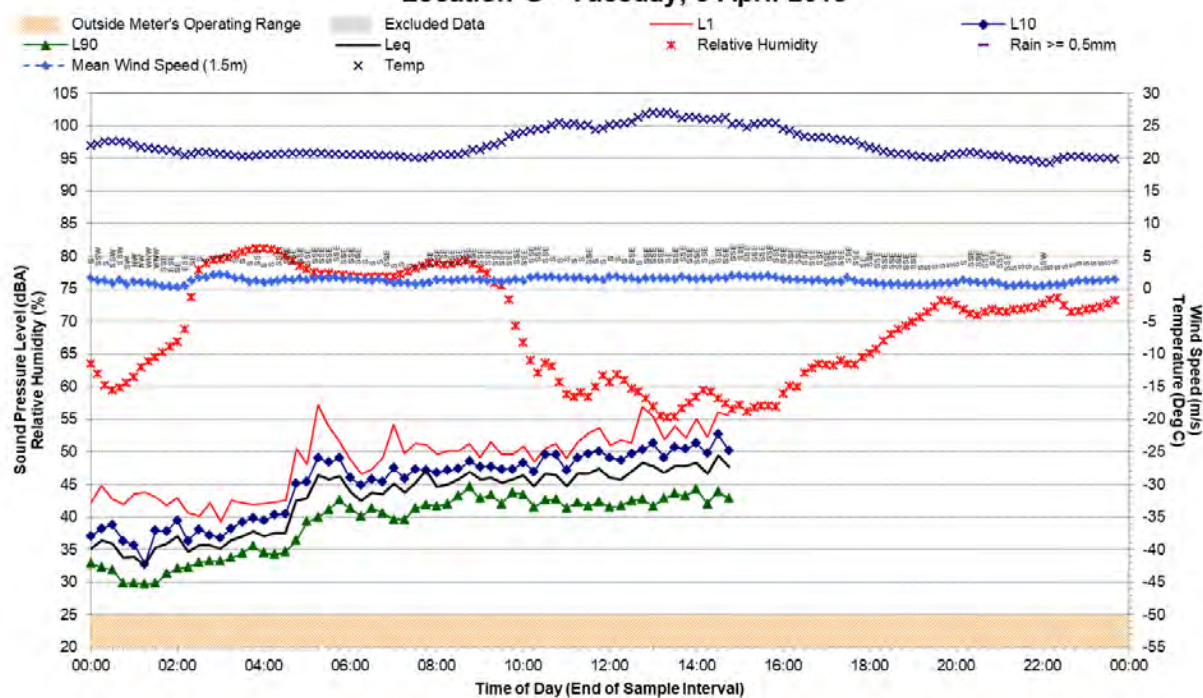
Statistical Ambient Noise Levels

Location G - Monday, 2 April 2018



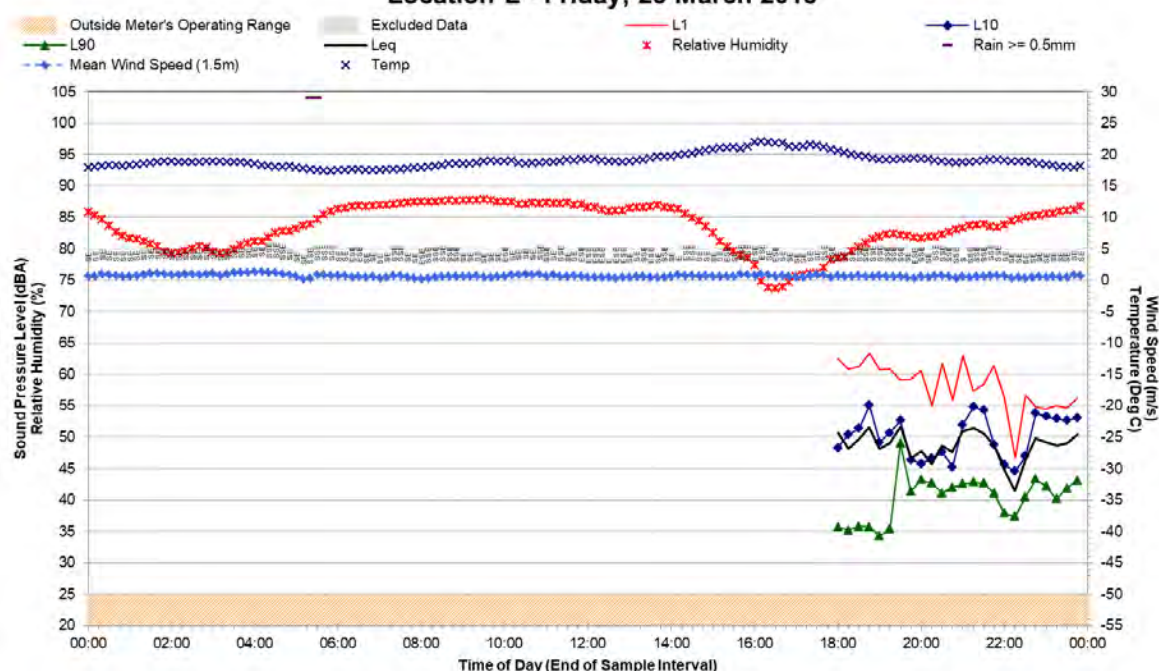
Statistical Ambient Noise Levels

Location G - Tuesday, 3 April 2018



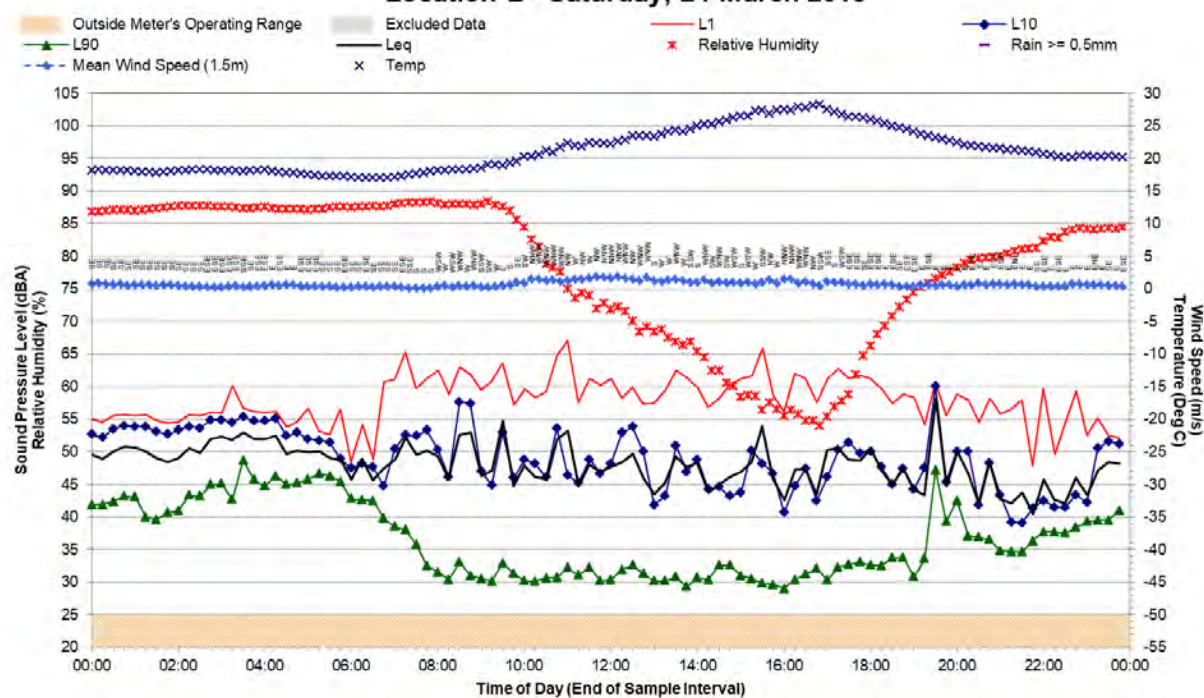
Statistical Ambient Noise Levels

Location L - Friday, 23 March 2018



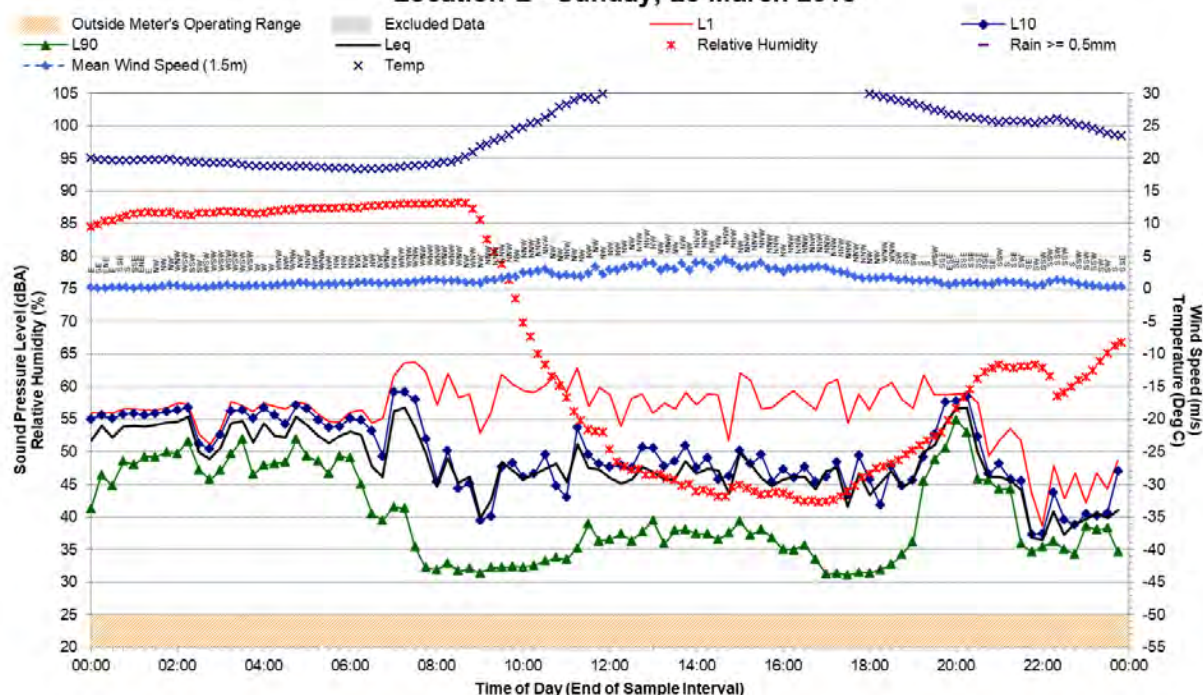
Statistical Ambient Noise Levels

Location L - Saturday, 24 March 2018



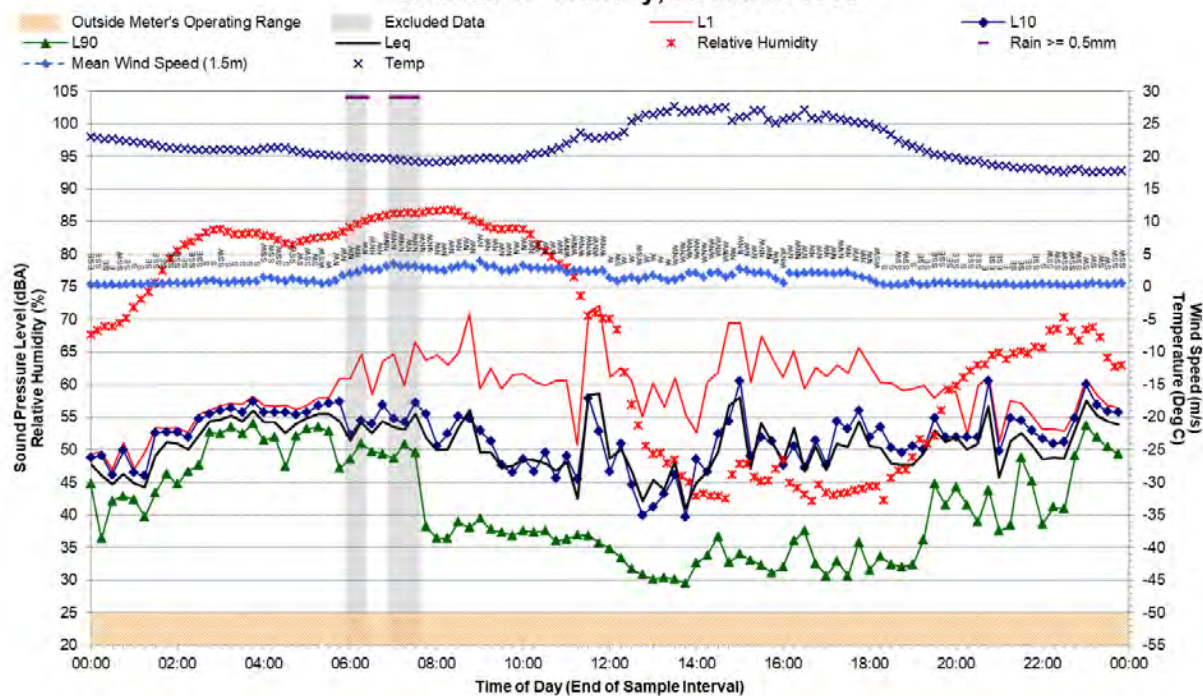
Statistical Ambient Noise Levels

Location L - Sunday, 25 March 2018



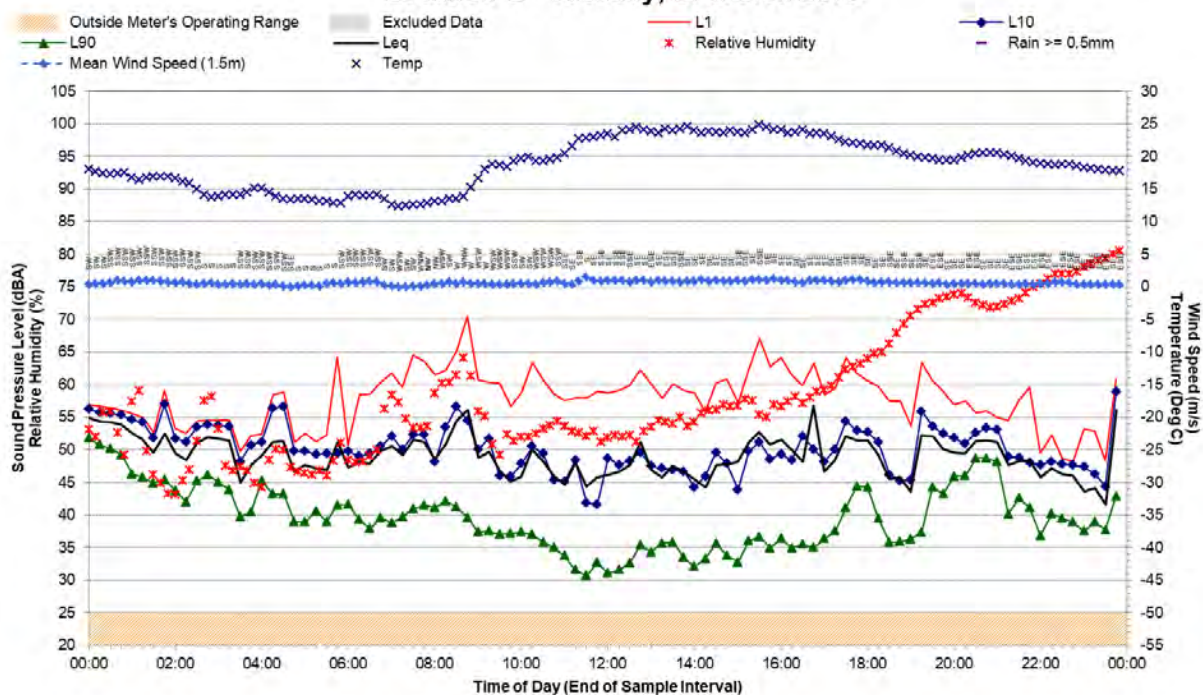
Statistical Ambient Noise Levels

Location L - Monday, 26 March 2018



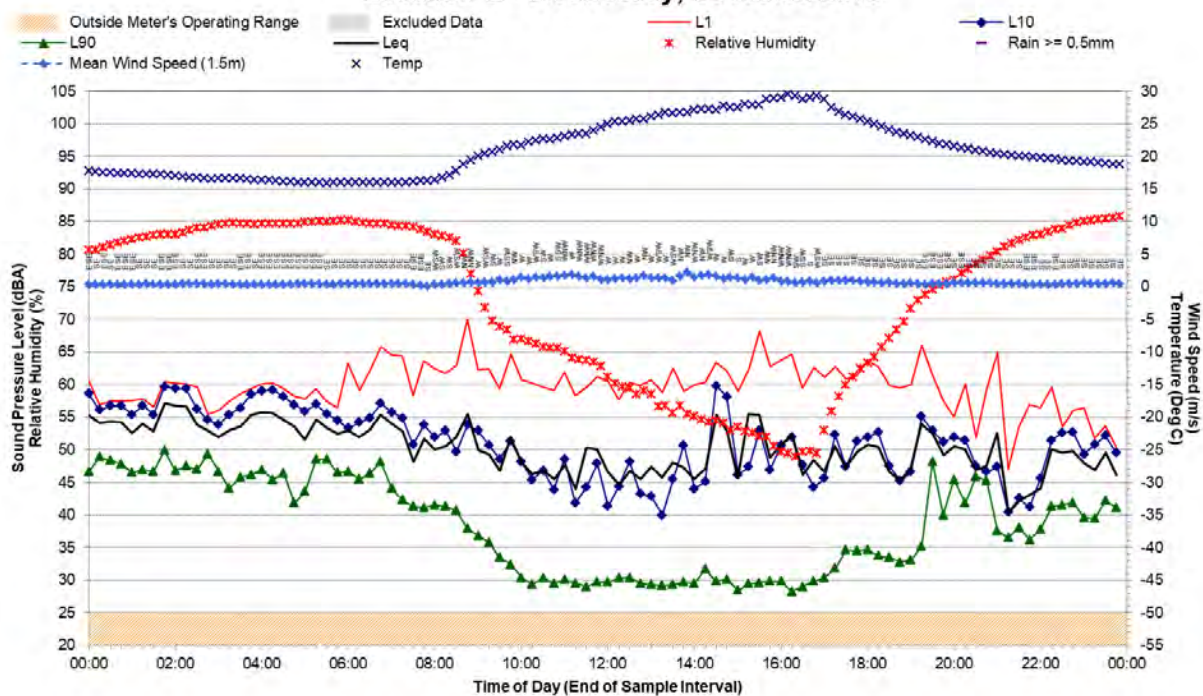
Statistical Ambient Noise Levels

Location L - Tuesday, 27 March 2018



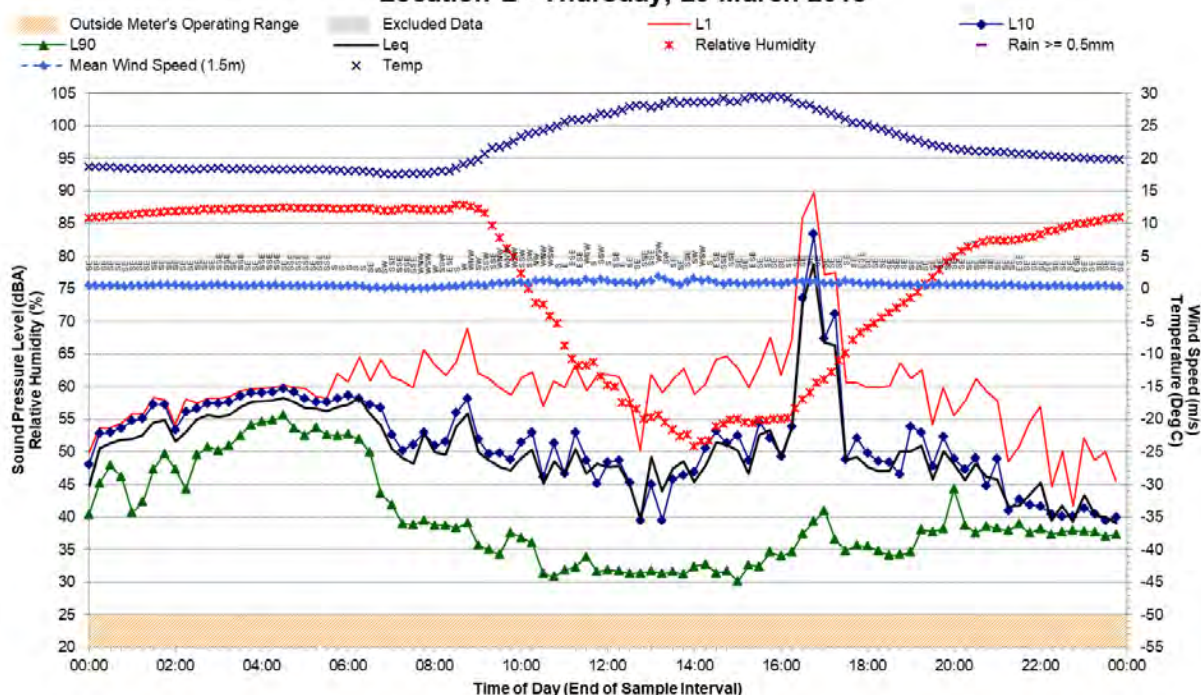
Statistical Ambient Noise Levels

Location L - Wednesday, 28 March 2018



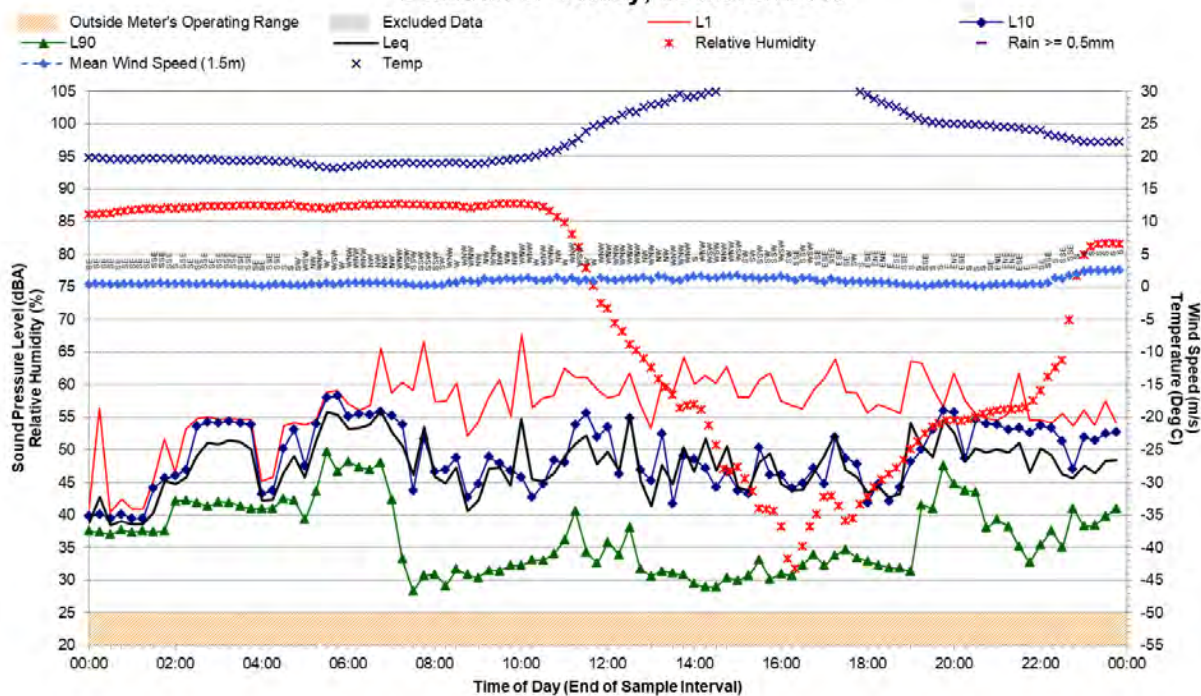
Statistical Ambient Noise Levels

Location L - Thursday, 29 March 2018



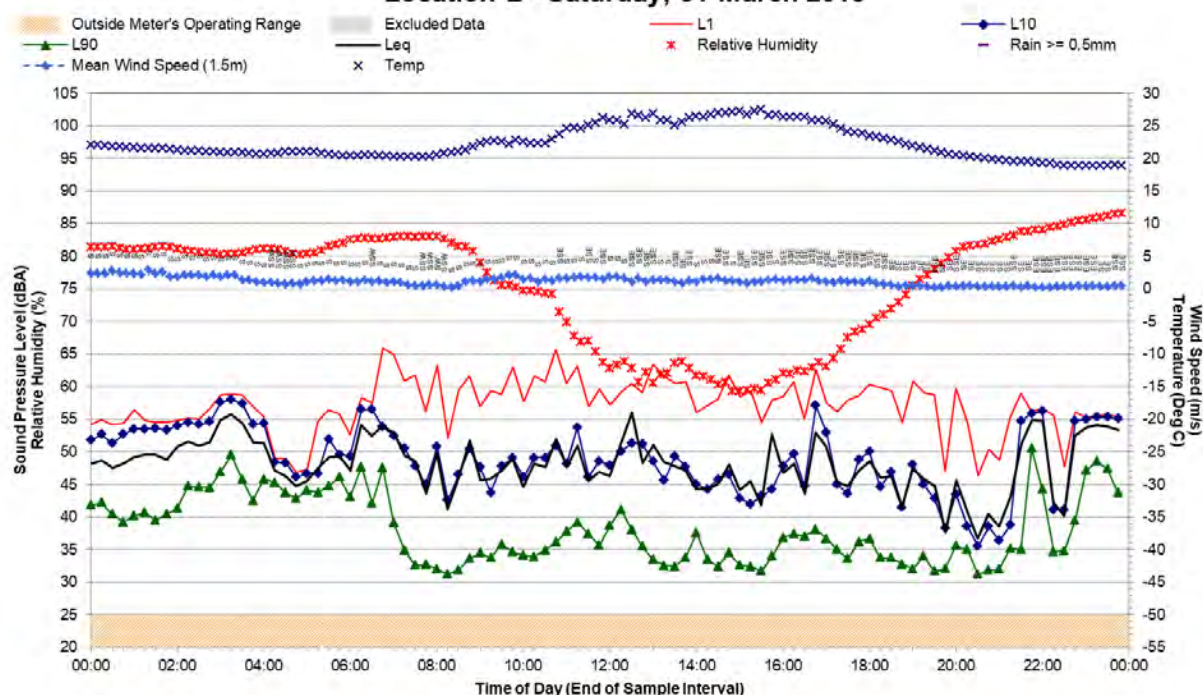
Statistical Ambient Noise Levels

Location L - Friday, 30 March 2018



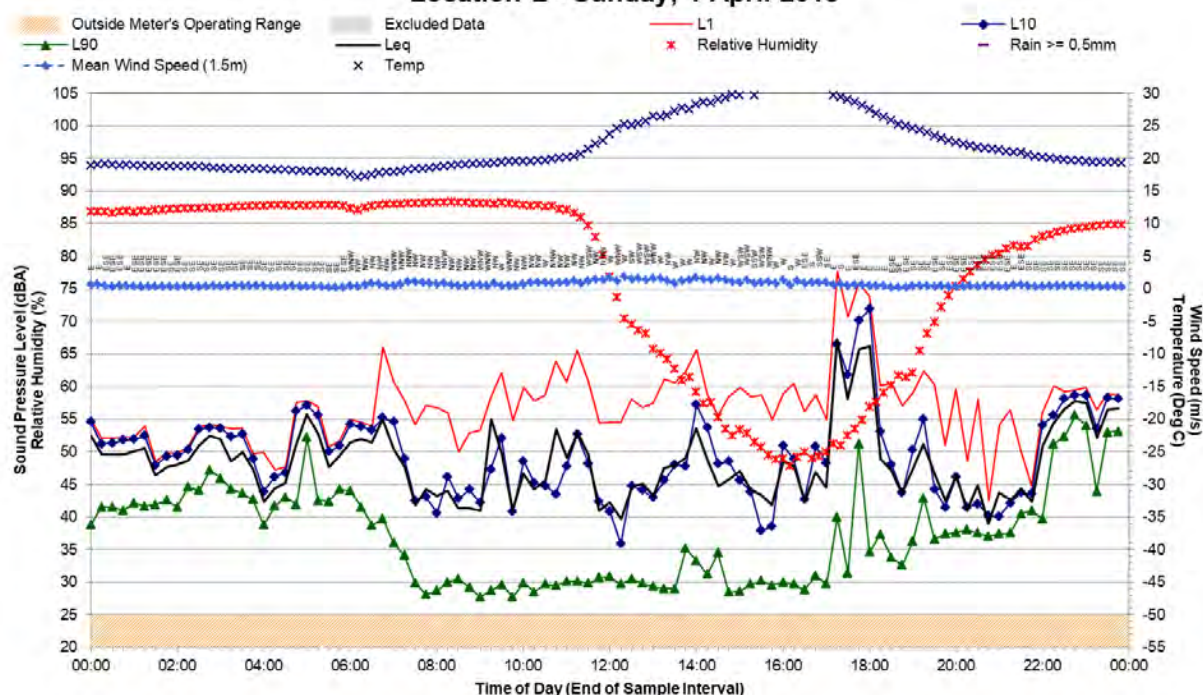
Statistical Ambient Noise Levels

Location L - Saturday, 31 March 2018



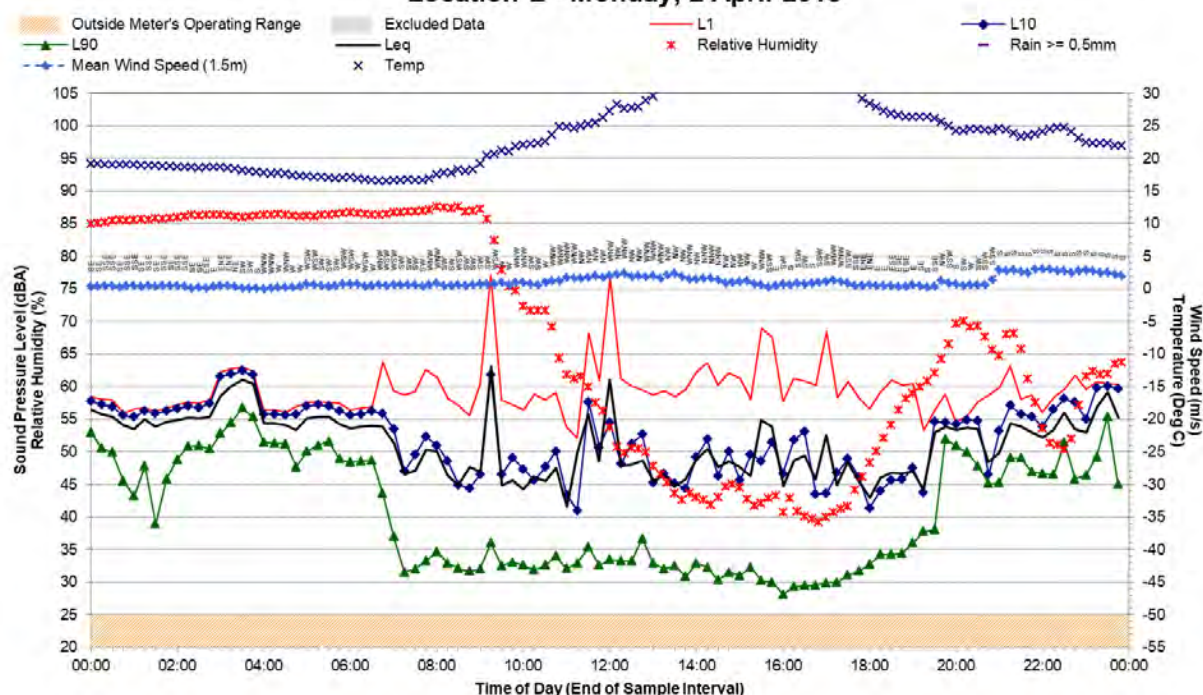
Statistical Ambient Noise Levels

Location L - Sunday, 1 April 2018



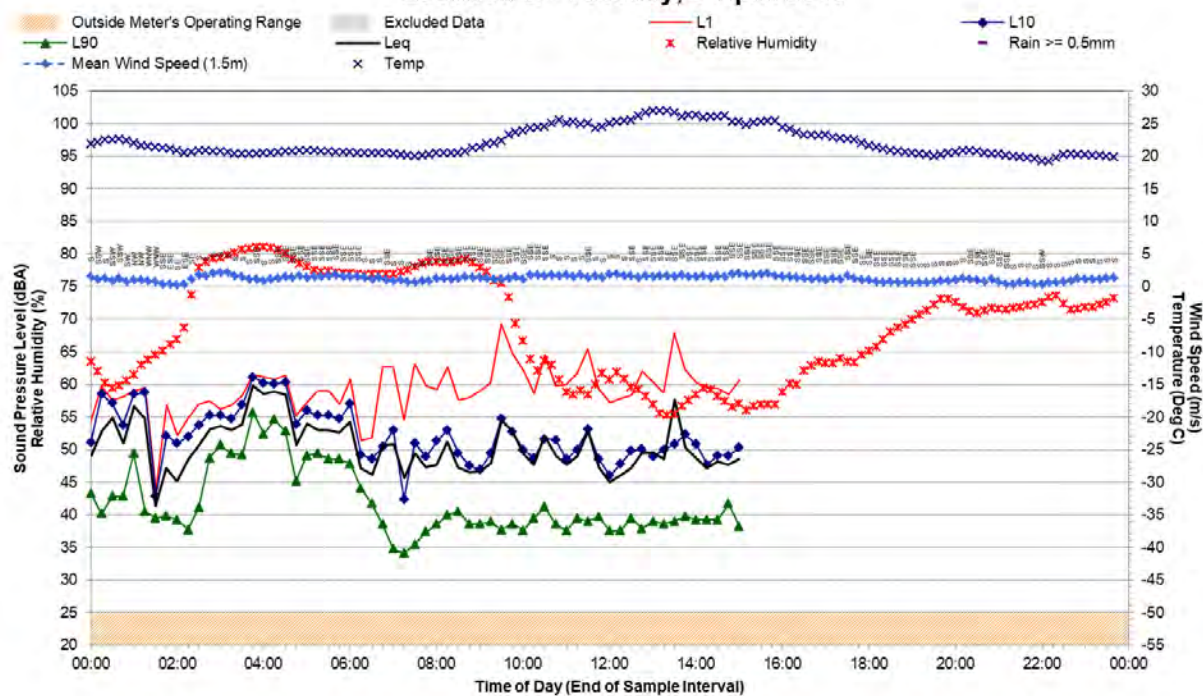
Statistical Ambient Noise Levels

Location L - Monday, 2 April 2018



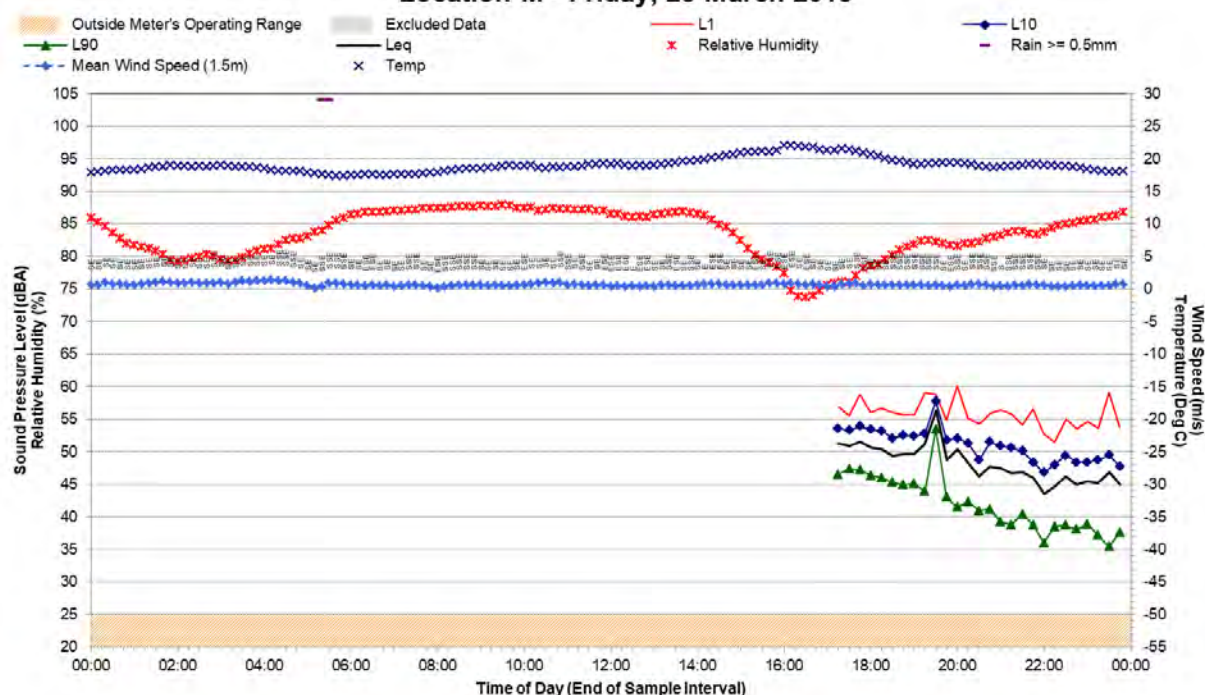
Statistical Ambient Noise Levels

Location L - Tuesday, 3 April 2018



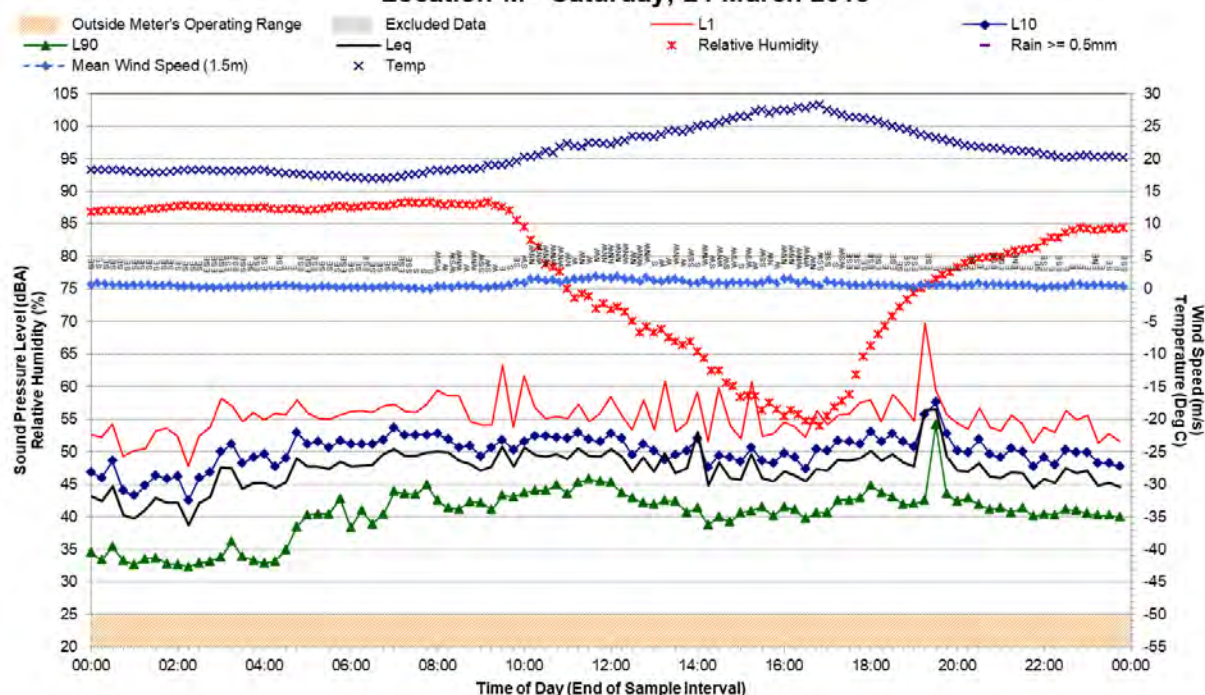
Statistical Ambient Noise Levels

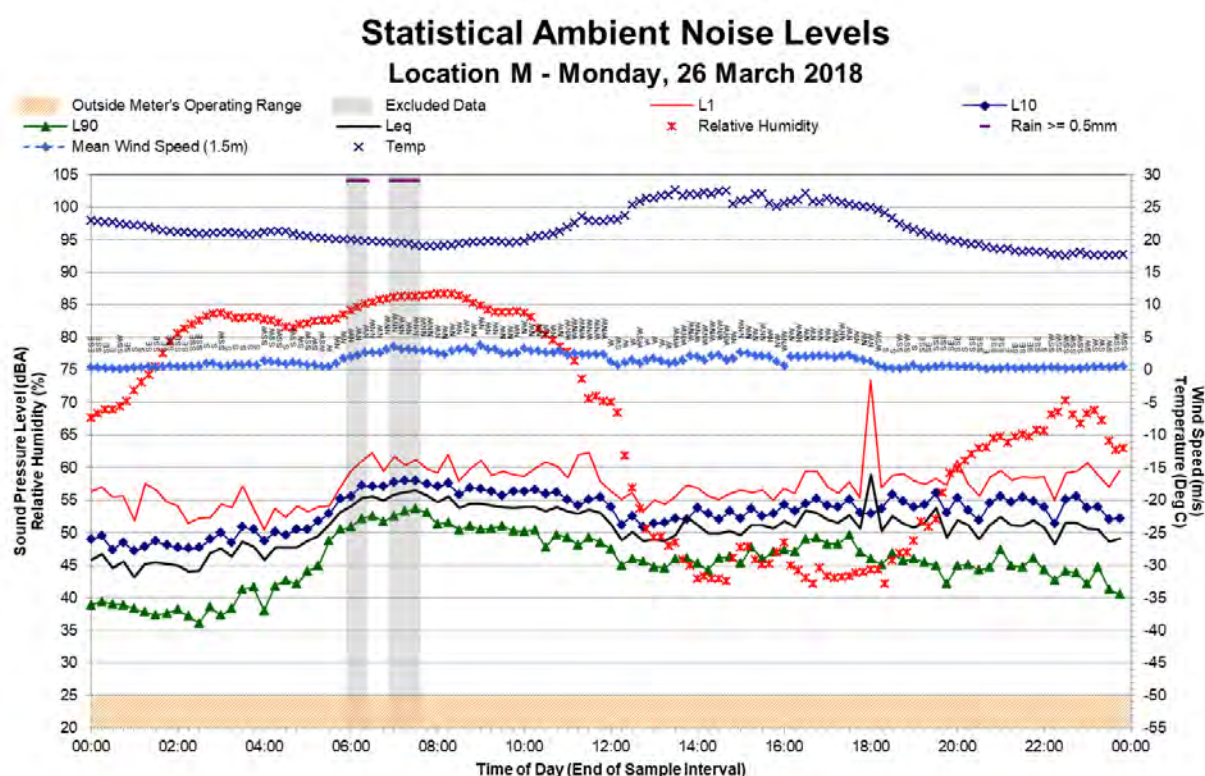
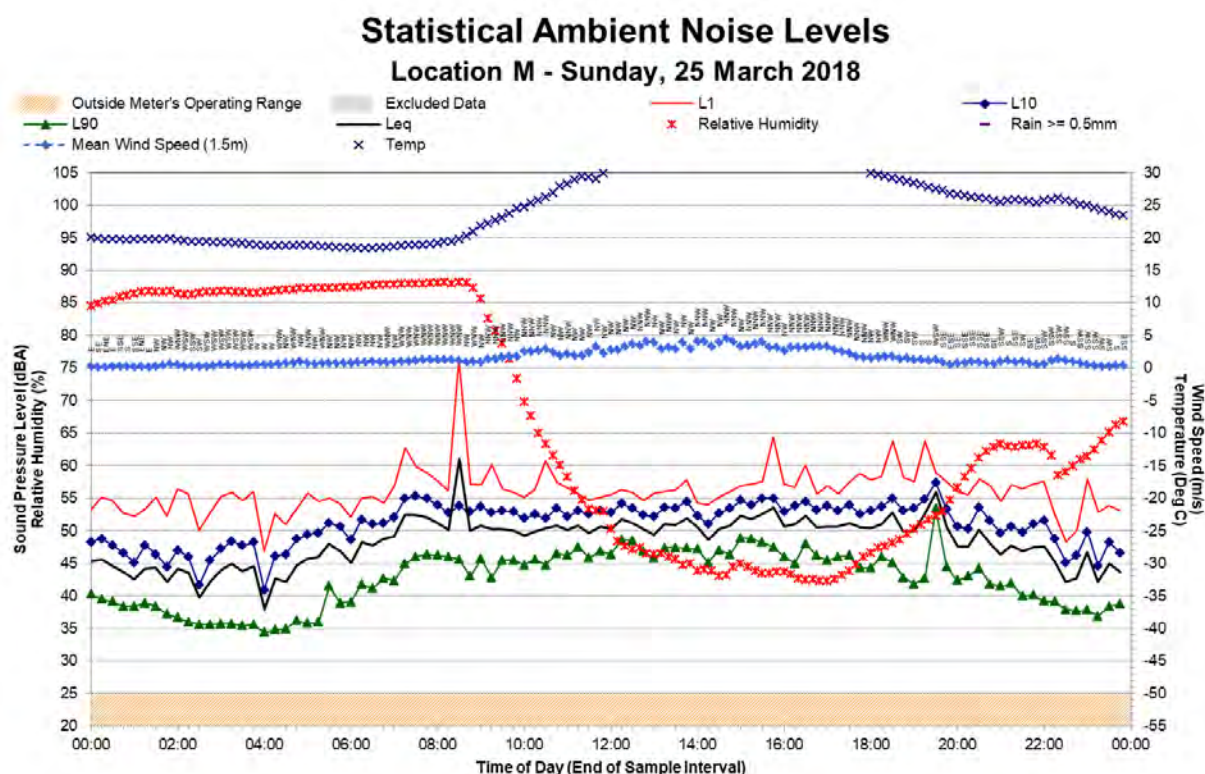
Location M - Friday, 23 March 2018



Statistical Ambient Noise Levels

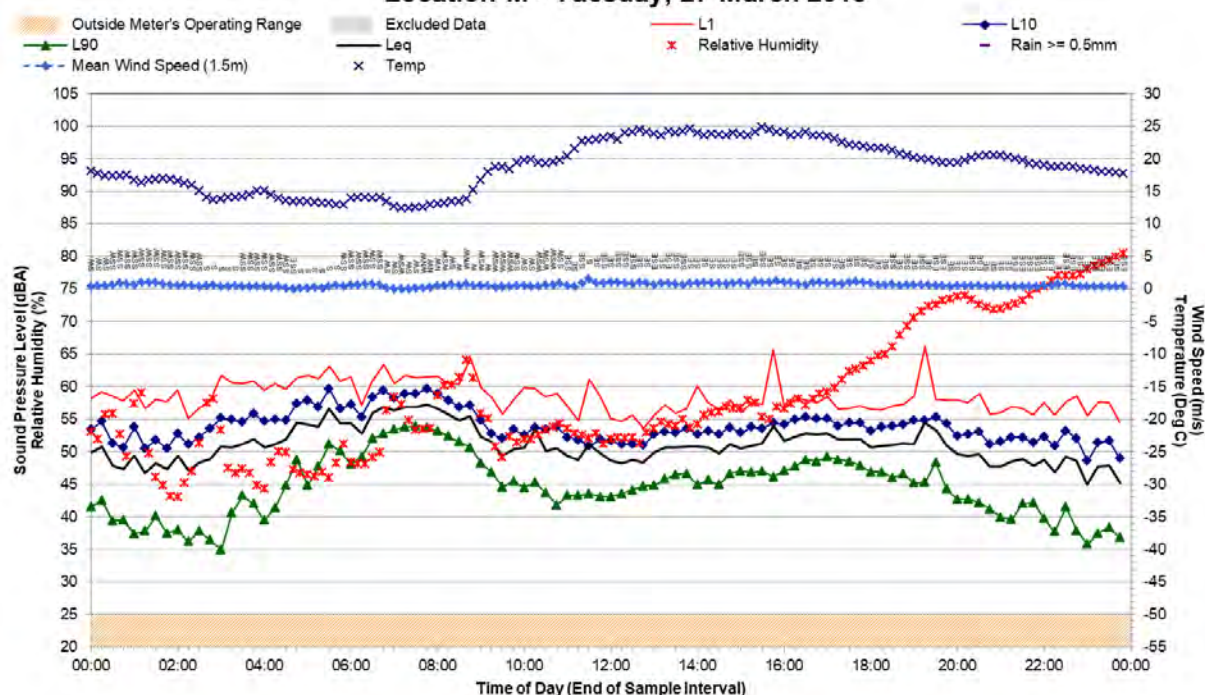
Location M - Saturday, 24 March 2018





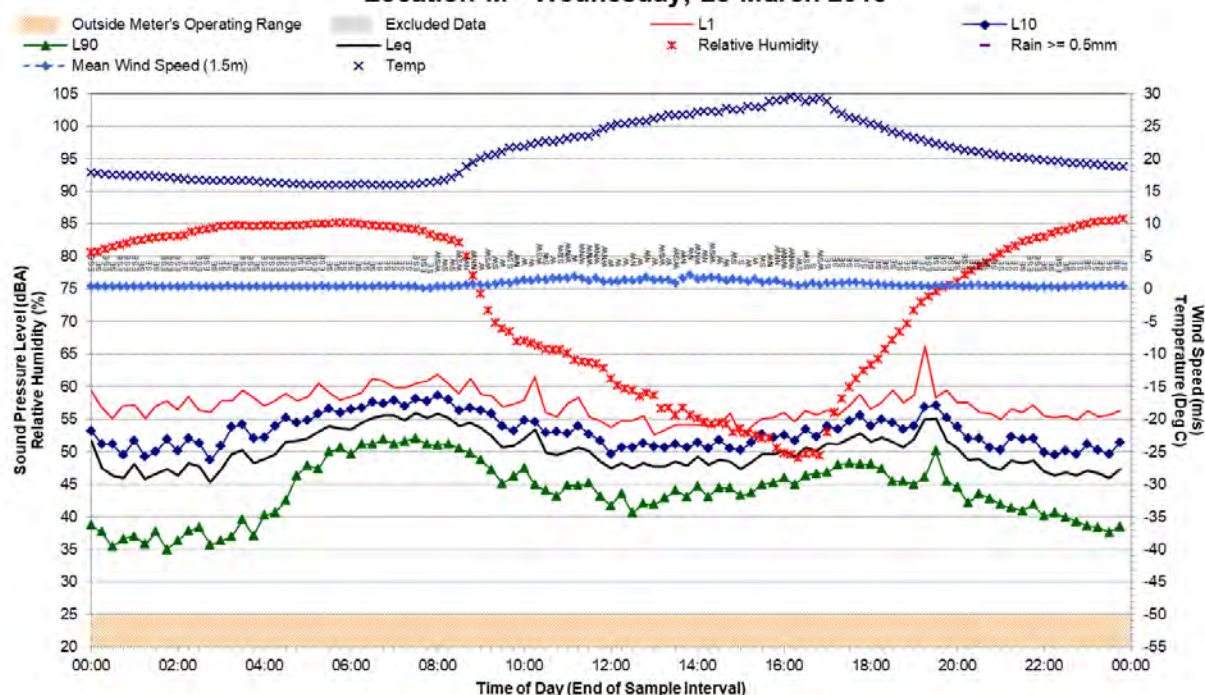
Statistical Ambient Noise Levels

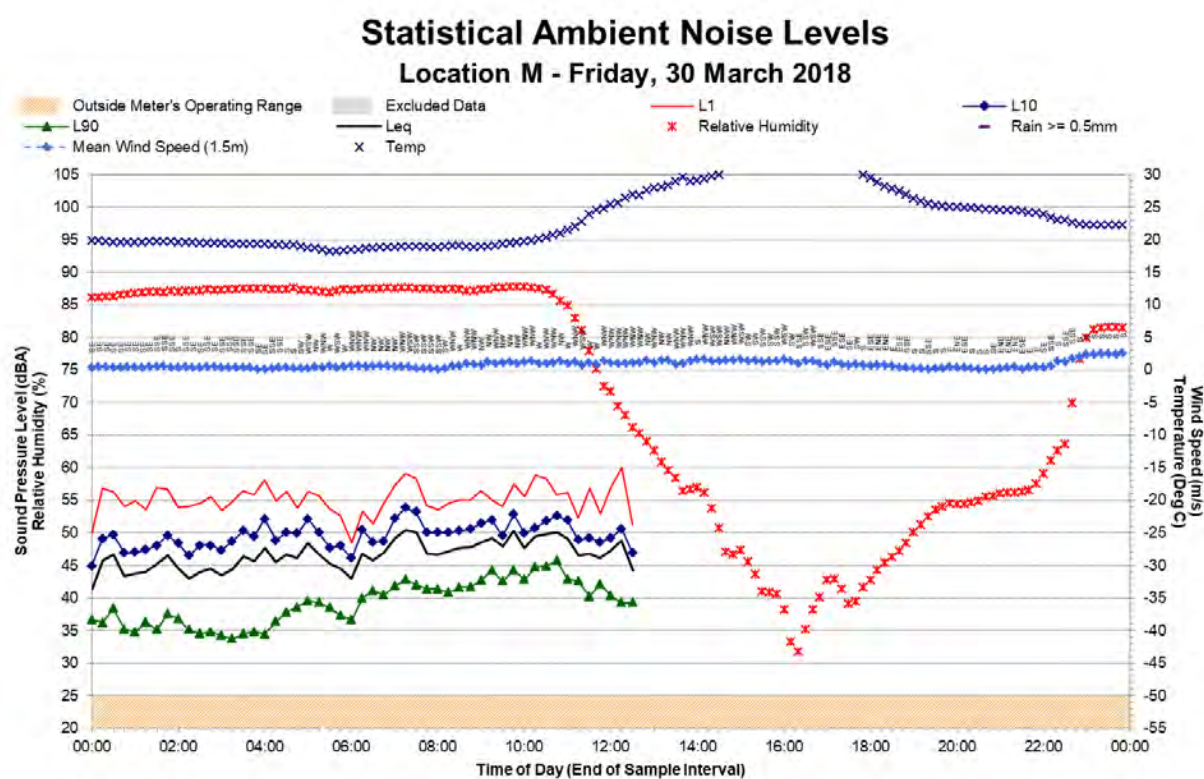
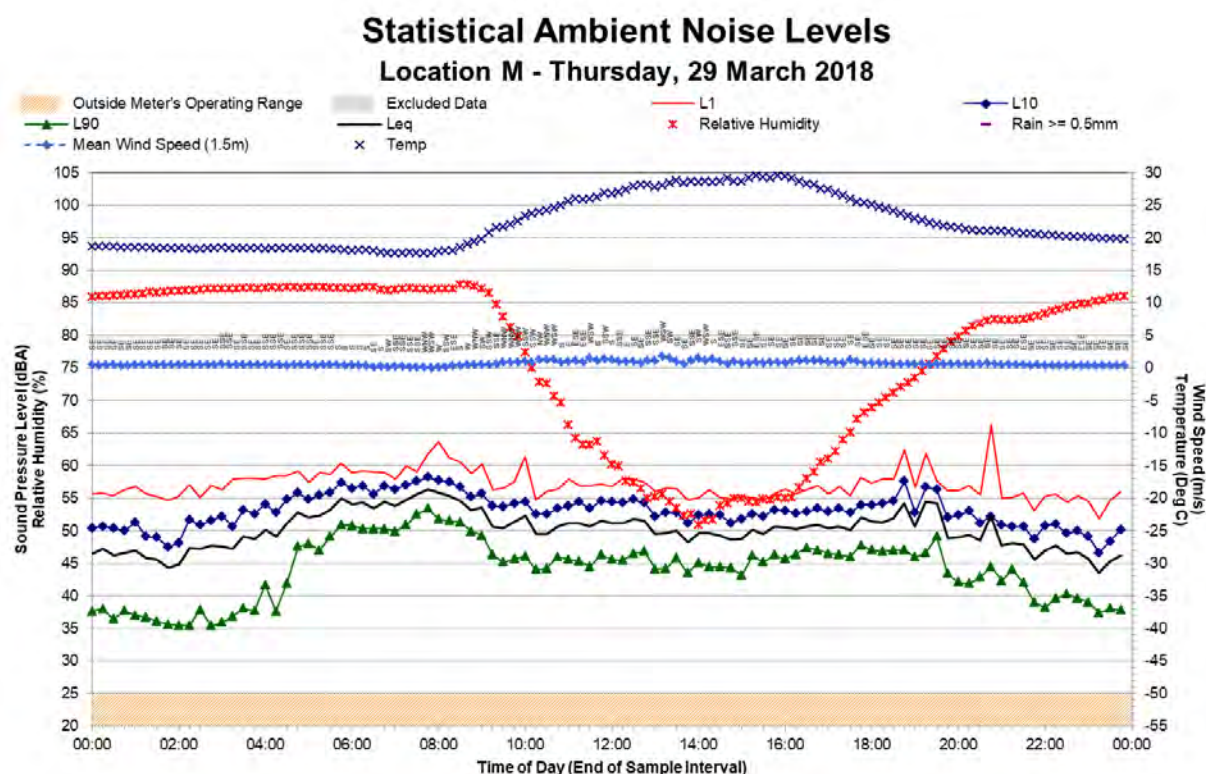
Location M - Tuesday, 27 March 2018



Statistical Ambient Noise Levels

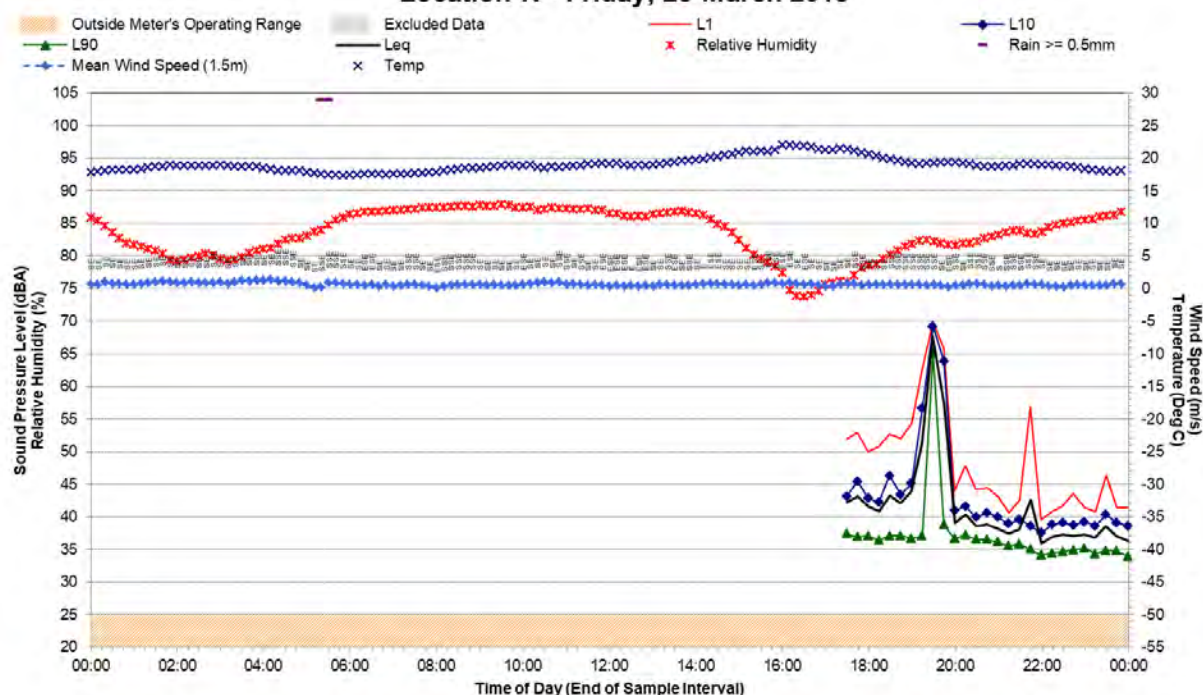
Location M - Wednesday, 28 March 2018





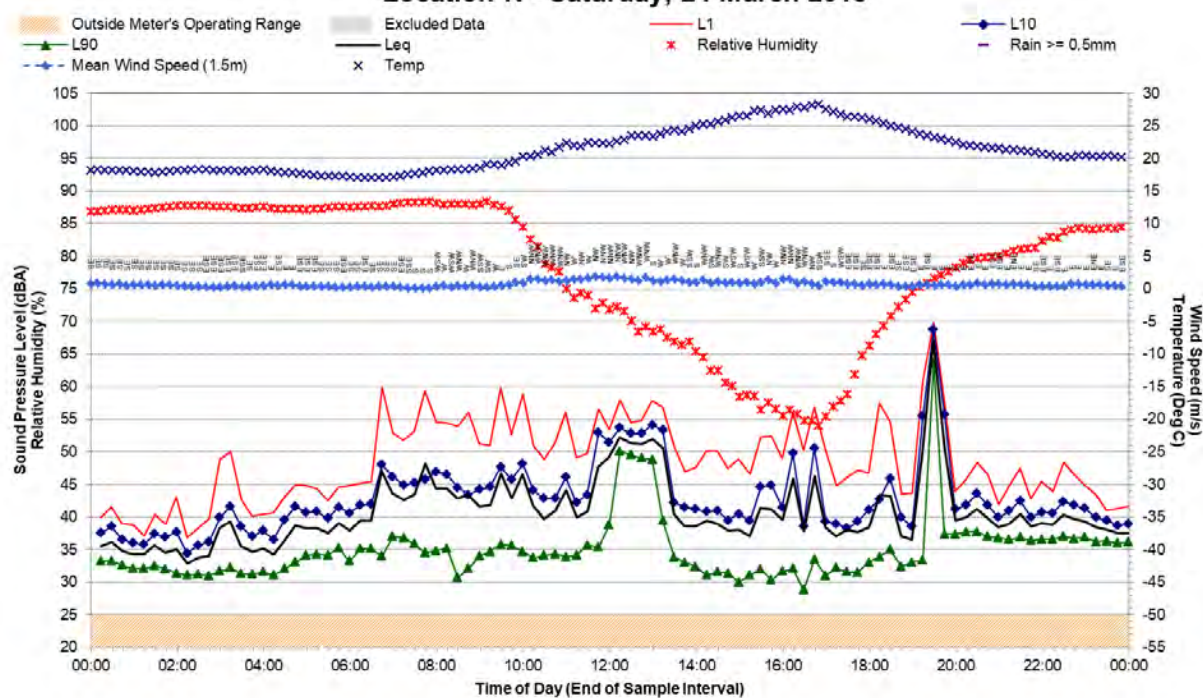
Statistical Ambient Noise Levels

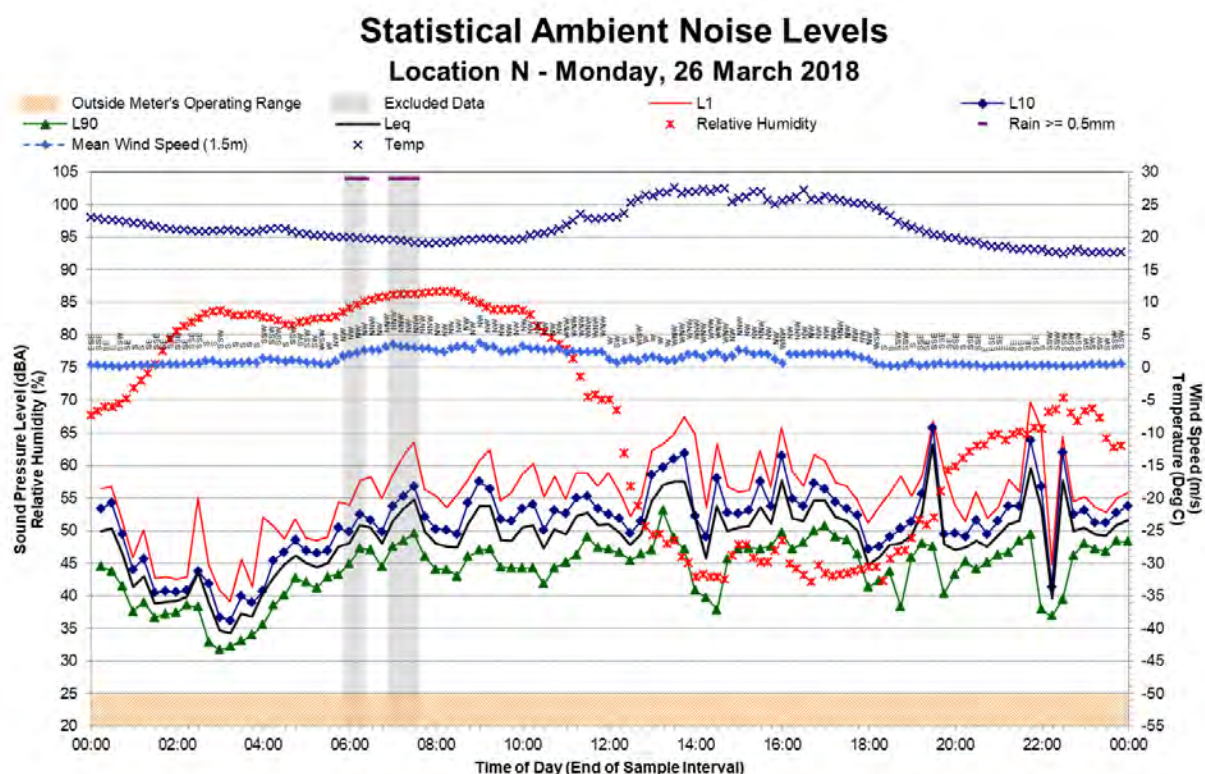
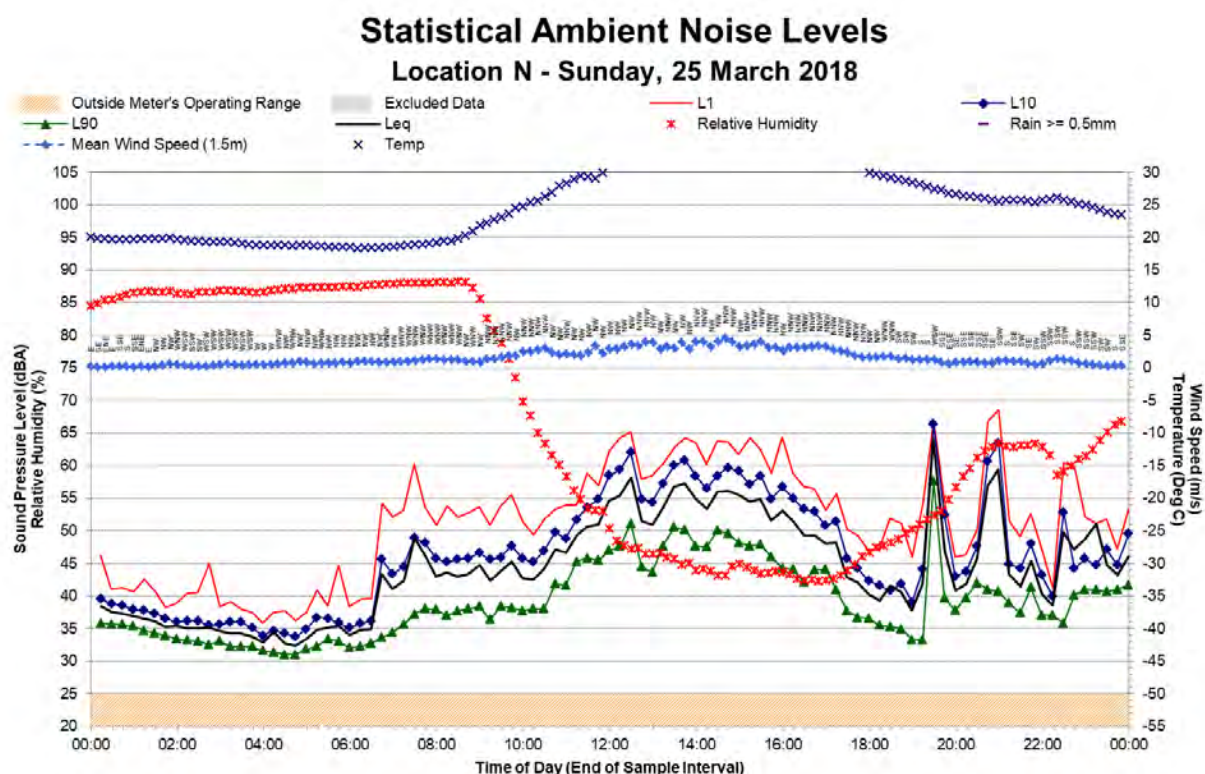
Location N - Friday, 23 March 2018



Statistical Ambient Noise Levels

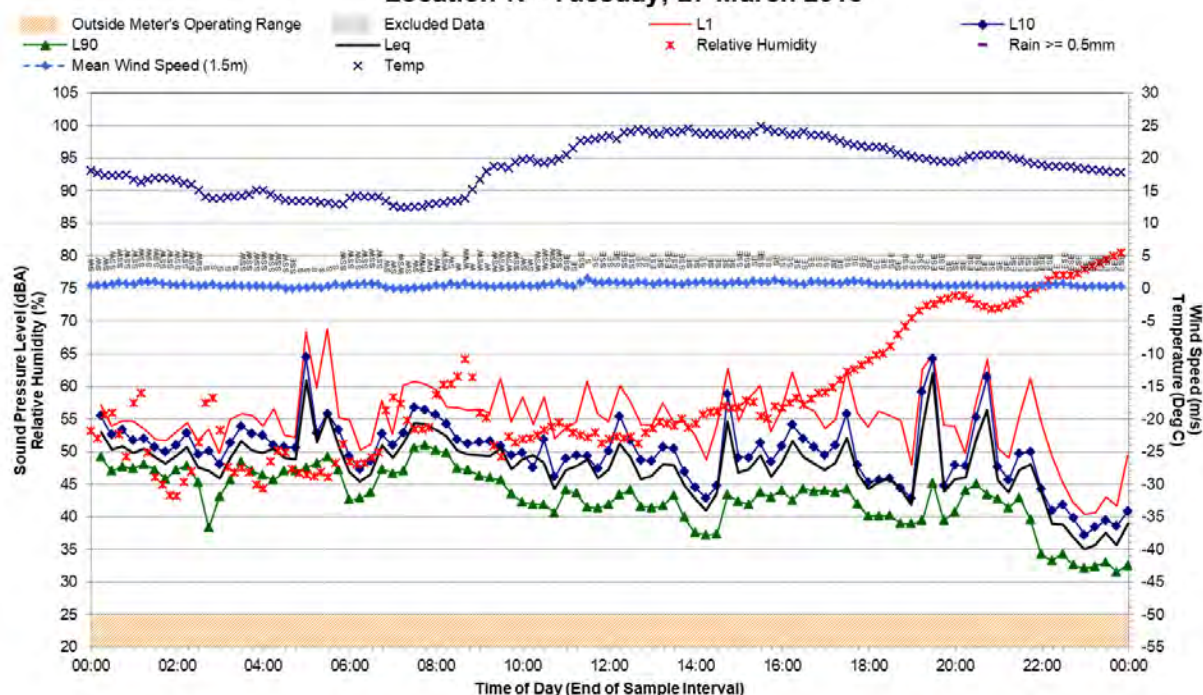
Location N - Saturday, 24 March 2018





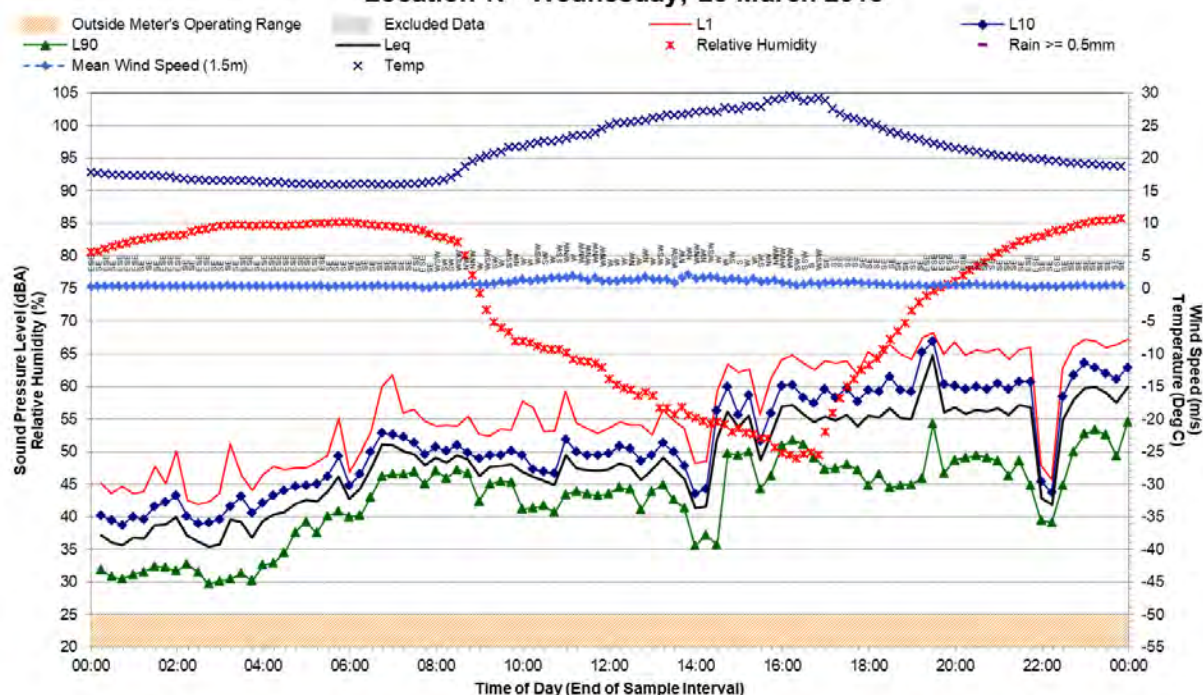
Statistical Ambient Noise Levels

Location N - Tuesday, 27 March 2018



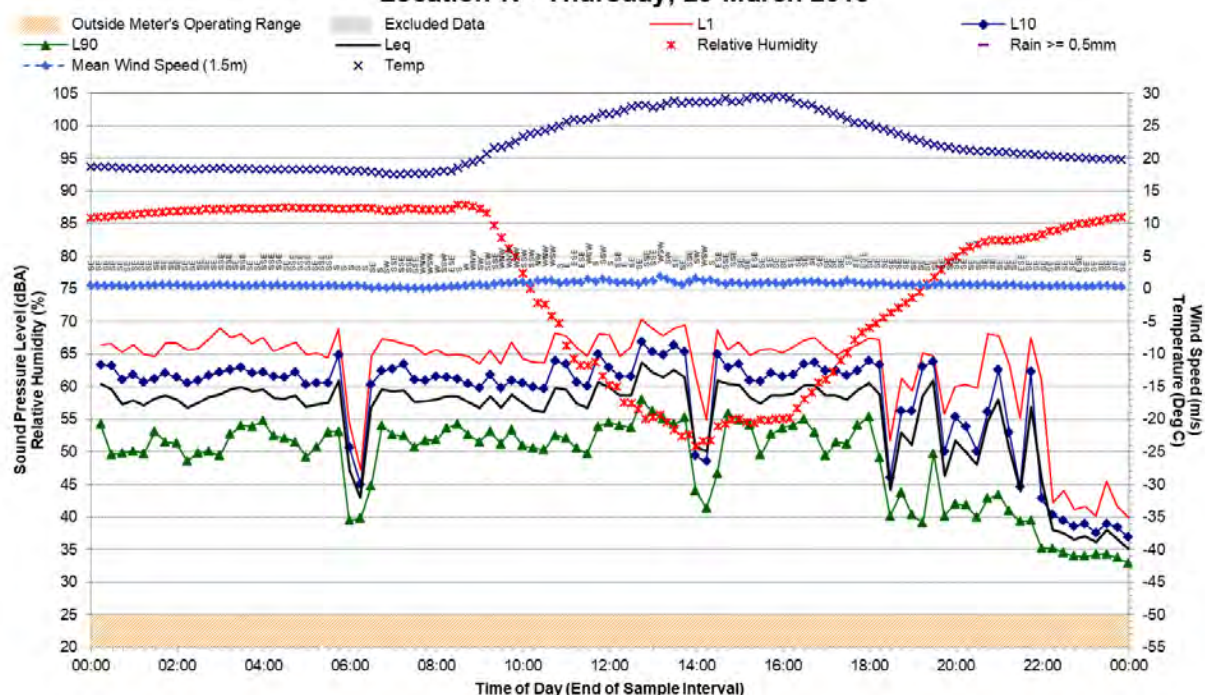
Statistical Ambient Noise Levels

Location N - Wednesday, 28 March 2018



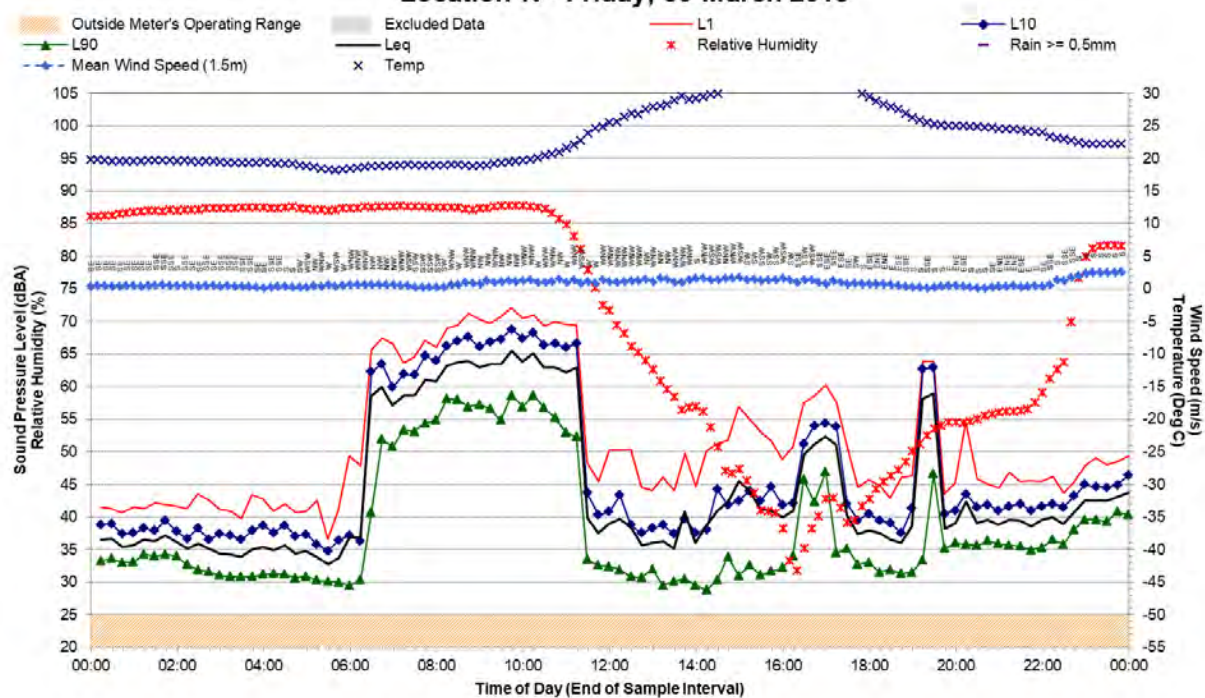
Statistical Ambient Noise Levels

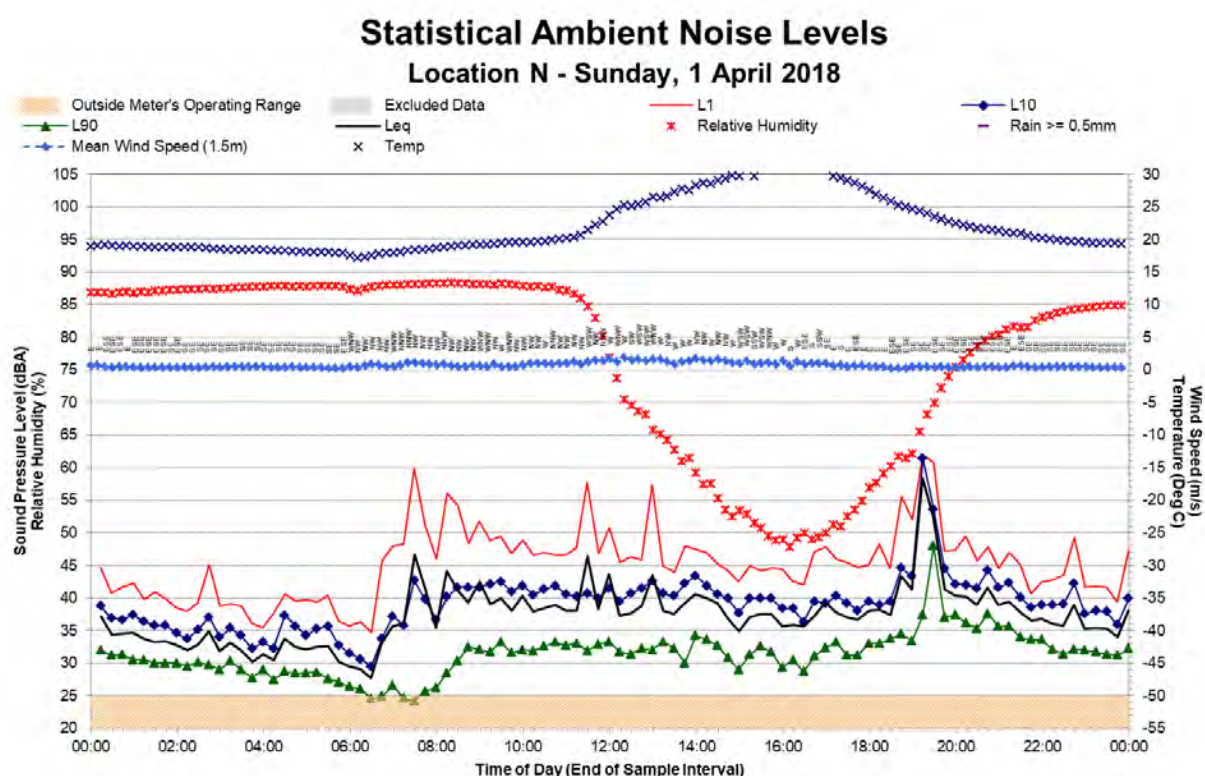
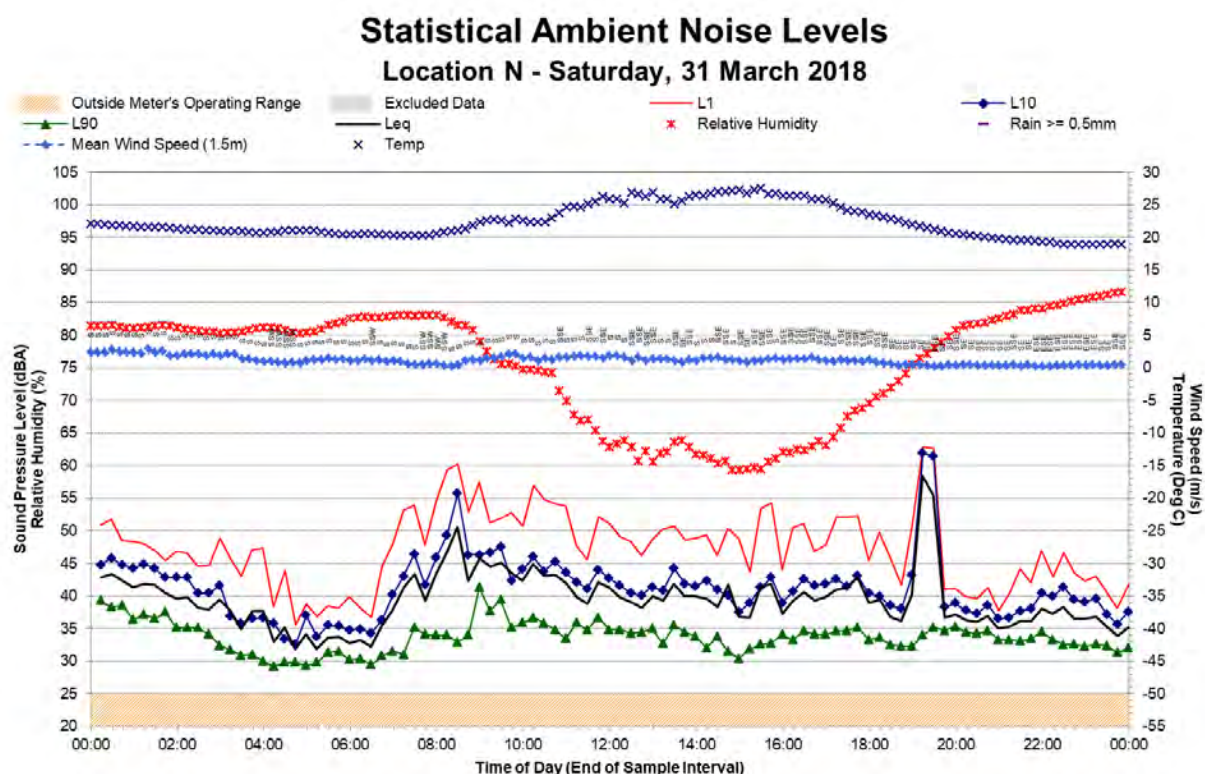
Location N - Thursday, 29 March 2018



Statistical Ambient Noise Levels

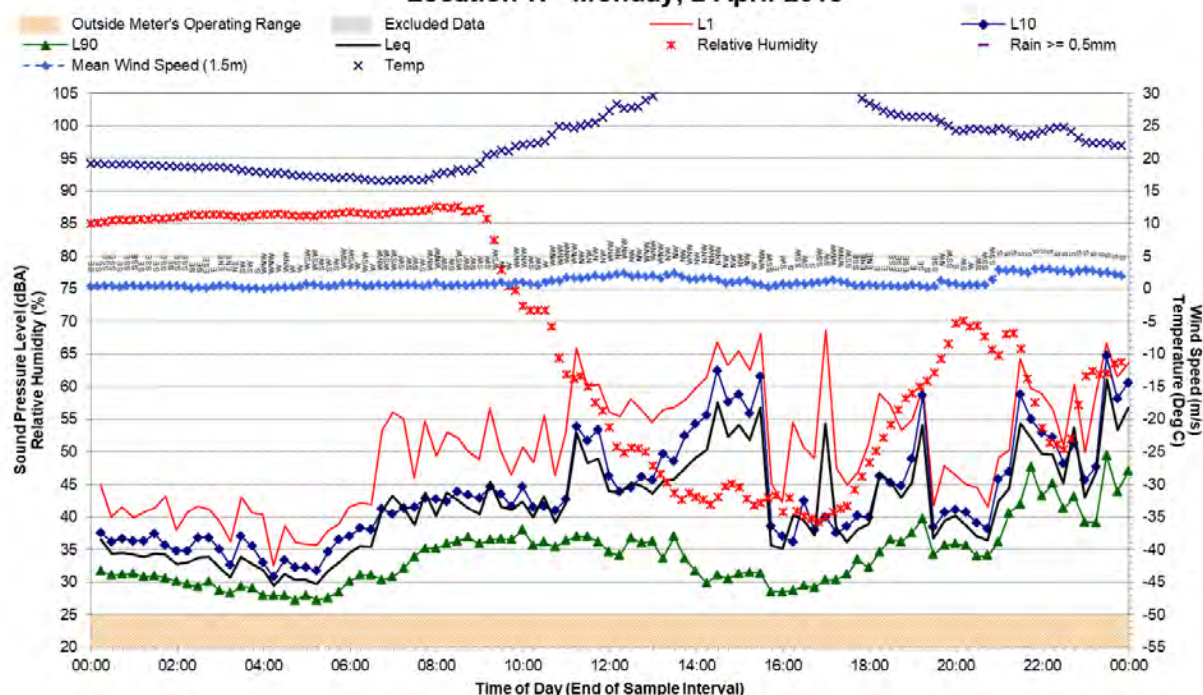
Location N - Friday, 30 March 2018





Statistical Ambient Noise Levels

Location N - Monday, 2 April 2018



Statistical Ambient Noise Levels

Location N - Tuesday, 3 April 2018

