

Springwell Solar Farm

Environmental Statement

Appendix 12.1 - Baseline Noise Survey Results

Volume 3

EN010149/APP/6.3
November 2024
Springwell Energyfarm Ltd

APFP Regulation 5(2)(a)
Planning Act 2008
Infrastructure Planning
(Applications: Prescribed Forms
and Procedure) Regulations 2009



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1. Receptor Baseline Noise Survey Results

1.1. Representative Receptor Noise Levels

- 1.1.1. Representative noise levels for receptors were measured at baseline monitoring locations, shown in **ES Volume 2, Figure 12.2: Baseline Survey Locations**.
- 1.1.2. Results of the baseline surveys are shown in the table and baseline graphs within this document, with information of the receptor and representative baseline monitoring location, daytime (07:00 to 23:00) ambient noise level, representative daytime background noise level, night-time (23:00 to 07:00) ambient noise level, and representative background noise level.

Table 1 – Receptors and baseline survey monitoring results

Receptor	Representative Baseline Monitoring Location	Daytime Noise Levels		Night-time Noise Levels	
		Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,1hour}$	Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,15minute}$
Gorse Hill Farm	1	46	34	43	29
The Bungalow, Gorse Hill Road	1	46	34	43	29
14 Martin Court, Mallory Road, RAF Digby	8	43	31	38	20
13 Howard Road, RAF Digby	9	50	30	43	21
Rowston Cottages, Digby	9	50	30	43	21
The Lodge, Digby	10	51	36	48	26
Scopwick Mill	13	44	28	36	22
Mill Cottages, Scopwick	13	44	28	36	22
52 Heath Road, Scopwick	14	60	38	53	25
29 Heath Road, Scopwick	14	60	38	53	25

Receptor	Representative Baseline Monitoring Location	Daytime Noise Levels		Night-time Noise Levels	
		Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,1hour}$	Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,15minute}$
1 Vicarage Lane, Scopwick	14	60	38	53	25
Scopwick House, Scopwick	14	60	38	53	25
The Old Rectory, Blankney	17	51	36	42	23
The Hall Cottage, Blankney	17	51	36	42	23
Hall Farm, Blankney	17	51	36	42	23
Staging Post, Blankney	18	52	37	45	24
Brickyard Farm, Blankney	19	49	33	39	20
Scopwick Low Field Farm, Kirkby Green	20	47	31	45	20
The Mills, Kirkby Green	21	53	33	47	19

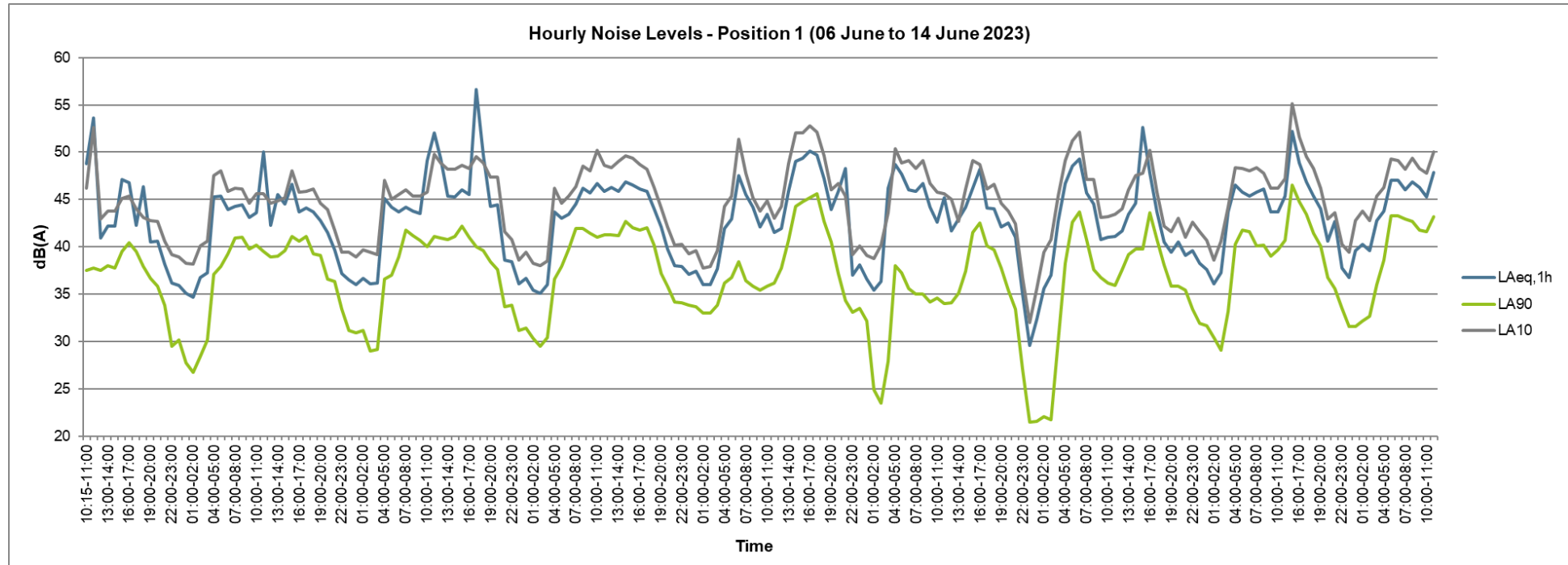
Receptor	Representative Baseline Monitoring Location	Daytime Noise Levels		Night-time Noise Levels	
		Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,1hour}$	Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,15minute}$
Harefield, Kirkby Green	22	44	31	35	19
Braemar Residential Park, Kirkby Green	22	44	31	35	19
Longfields, Scopwick	22	44	31	35	19
4 Springfield Estate, Scopwick	16	50	35	48	22
1 Glebe Close, Scopwick	16	50	35	48	22
6 Farriers Court, Scopwick	14	60	38	53	25
35 Beckside, Scopwick	14	60	38	53	25
4 Almonds Court, Scopwick	14	60	38	53	25
Sheffield House, Scopwick	15	47	33	41	22

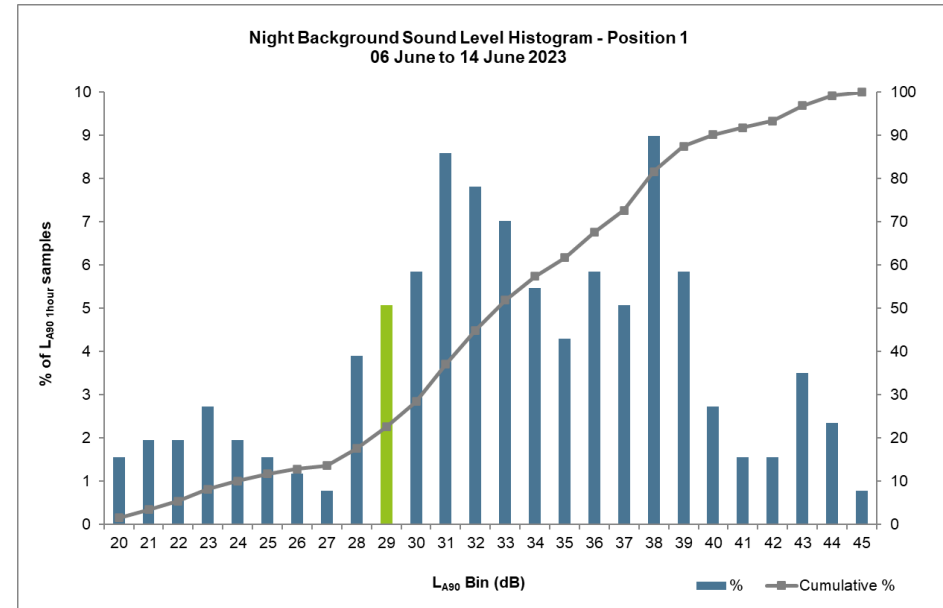
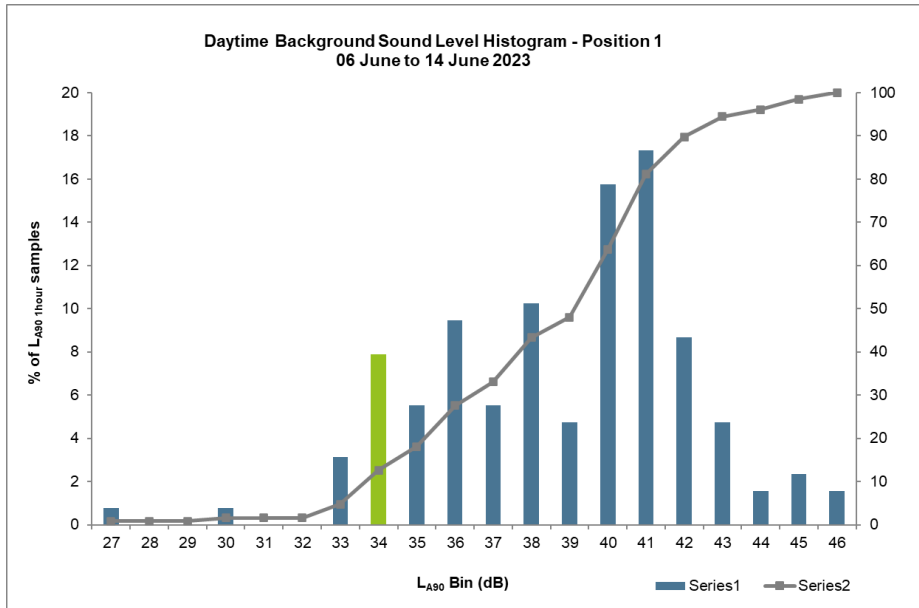
Receptor	Representative Baseline Monitoring Location	Daytime Noise Levels		Night-time Noise Levels	
		Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,1hour}$	Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,15minute}$
The Hayloft, Rowston Top	11	48	32	40	22
Glebe Farm, Digby	9	50	30	43	21
The Garden House, Digby	12	46	33	41	23
The Lodge, Ashby de la Launde	12	46	33	41	23
Slate House, Ashby de la Launde	6	44	30	43	22
Mount Farm, Ashby de la Launde	5	45	35	41	24
Peacock Lodge Cottages, Ashby de la Launde	5	45	35	41	24
Hill Farm Cottages, Brauncewell	4	44	31	35	22
Manor House, Brauncewell	4	44	31	35	22

Receptor	Representative Baseline Monitoring Location	Daytime Noise Levels		Night-time Noise Levels	
		Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,1hour}$	Ambient Noise Level, $L_{Aeq,T}$	Representative Background Sound Level, $L_{A90,15minute}$
Church House, Brauncewell	4	44	31	35	22
School Row, Brauncewell	3	53	43	50	26
7 Thompson's Bottom, Ashby de la Launde	2	49	40	45	30
1 Thompson's Bottom, Ashby de la Launde	2	49	40	45	30
Ashby Lodge, Ashby de la Launde	7	52	37	53	27
Toll Bar Cottages, Ashby de la Launde	7	52	37	53	27

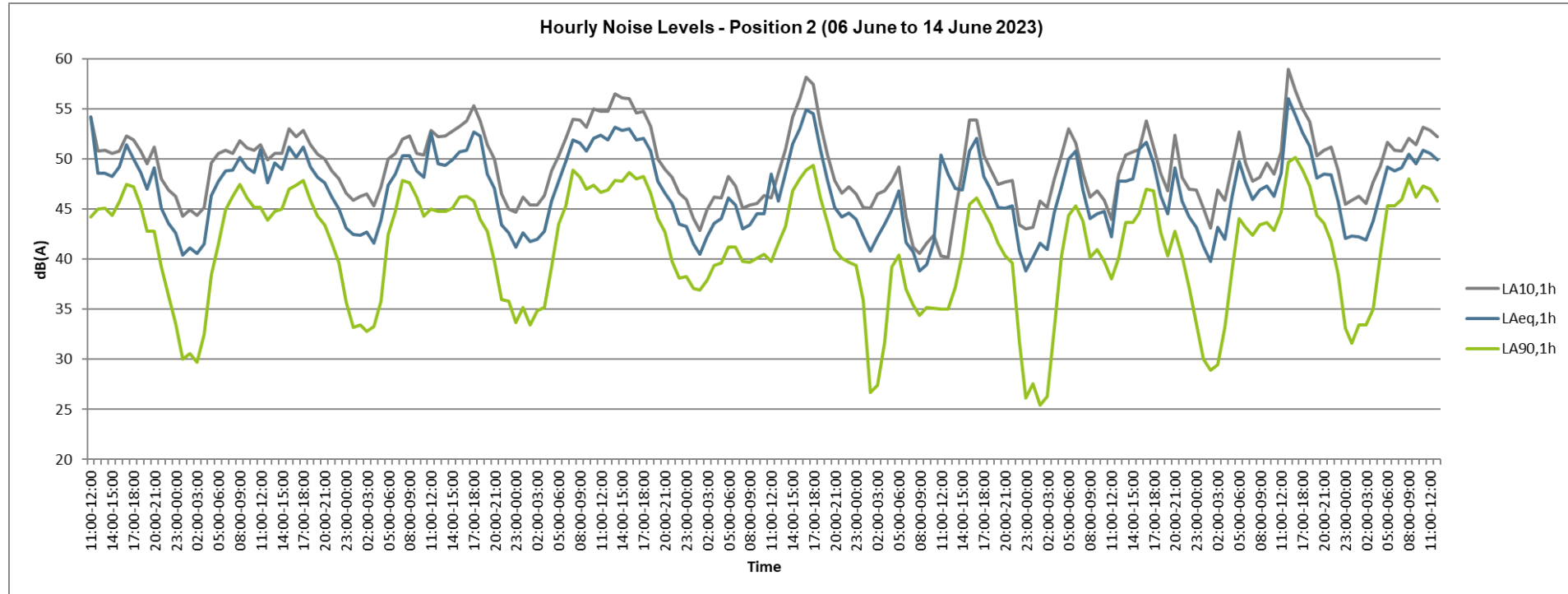
1.2. Baseline Graphs and Representative Background Noise Level Derivations

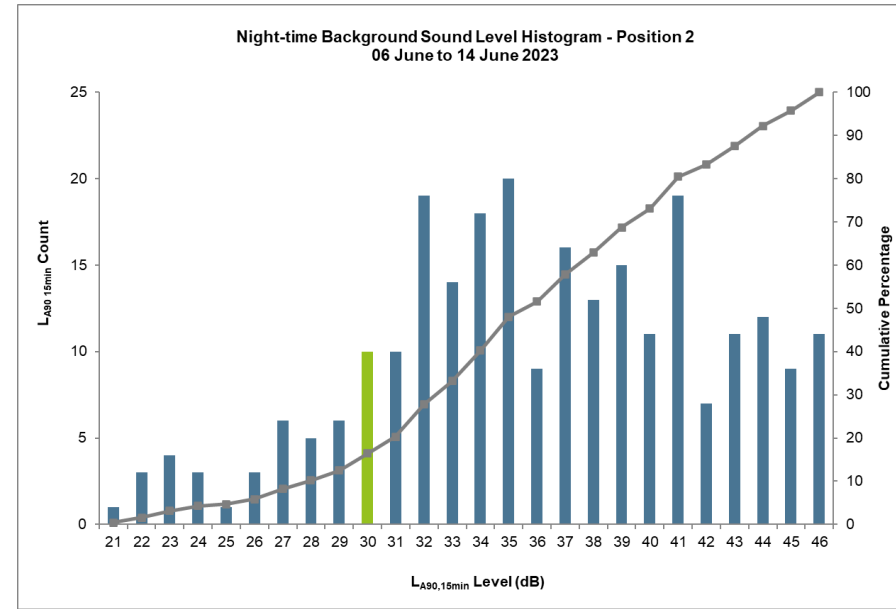
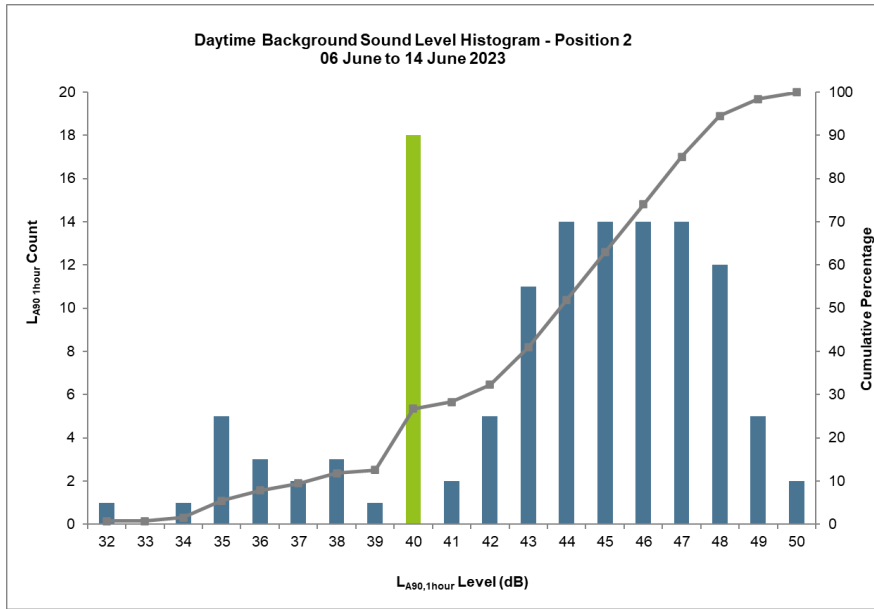
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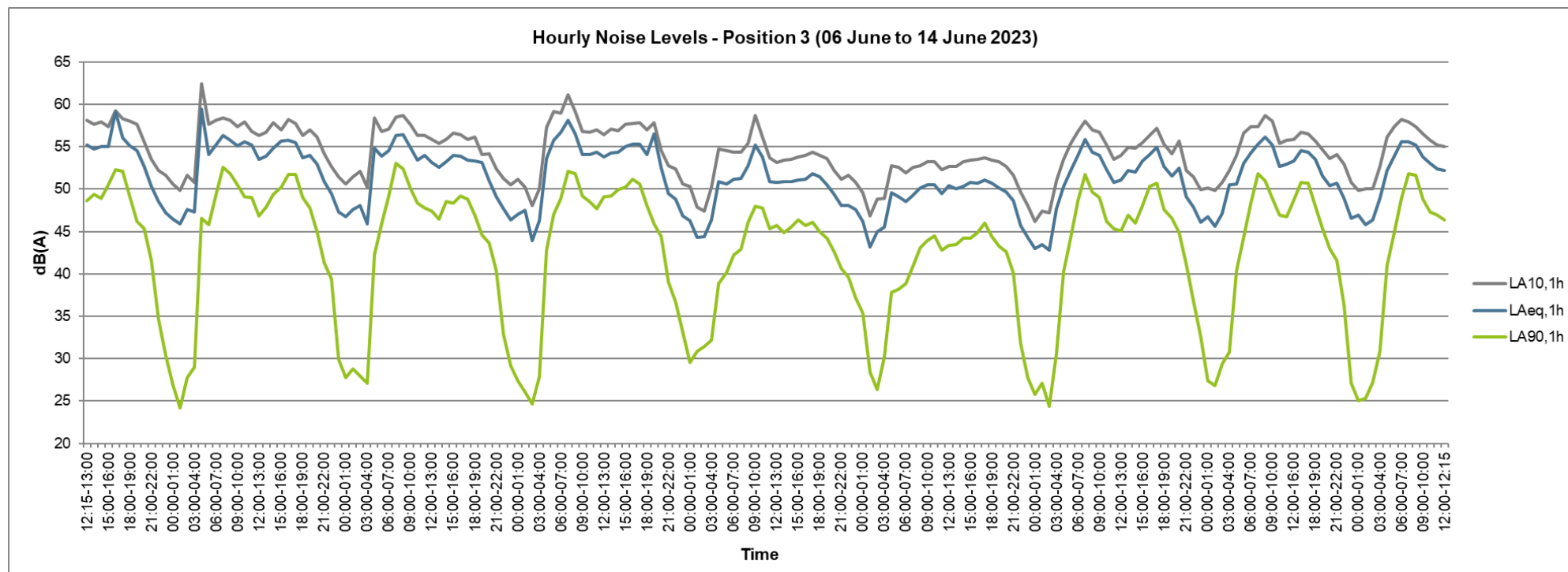


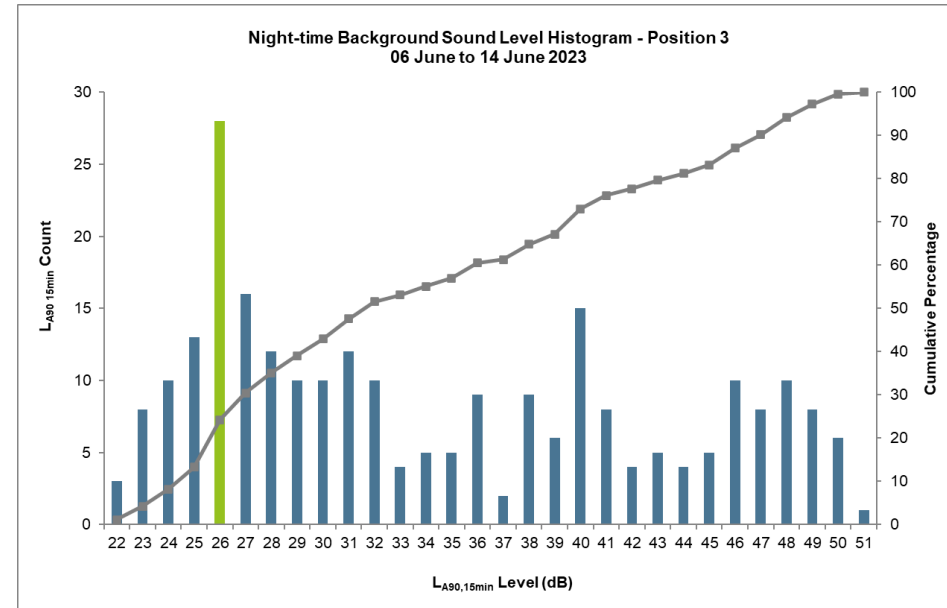
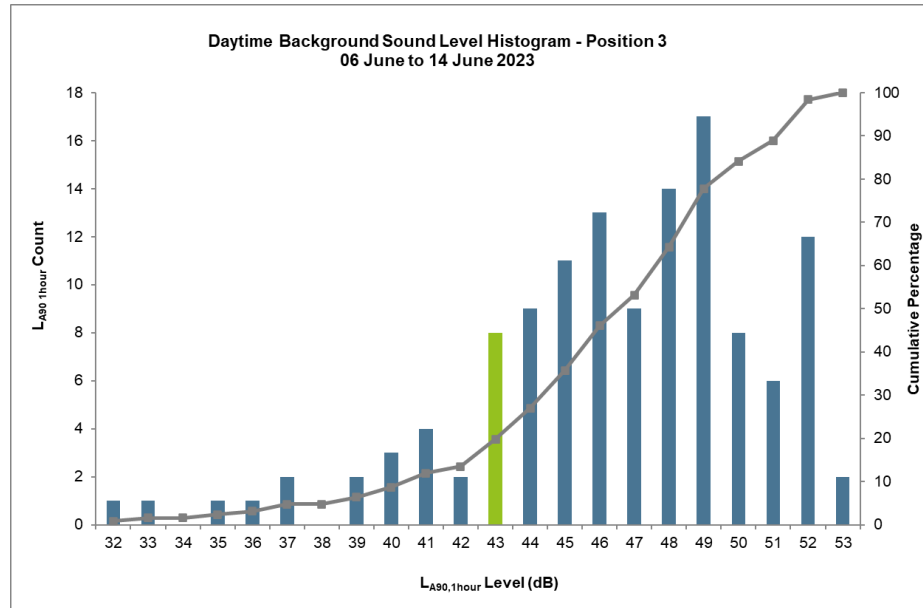
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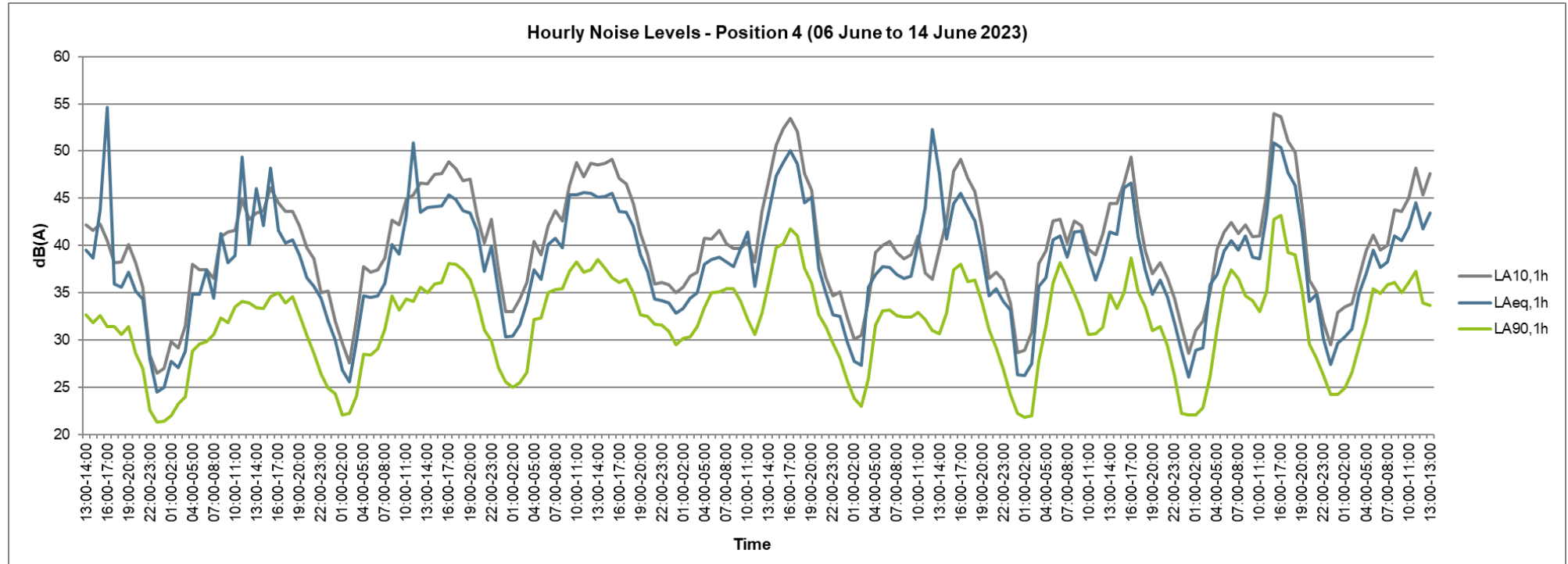


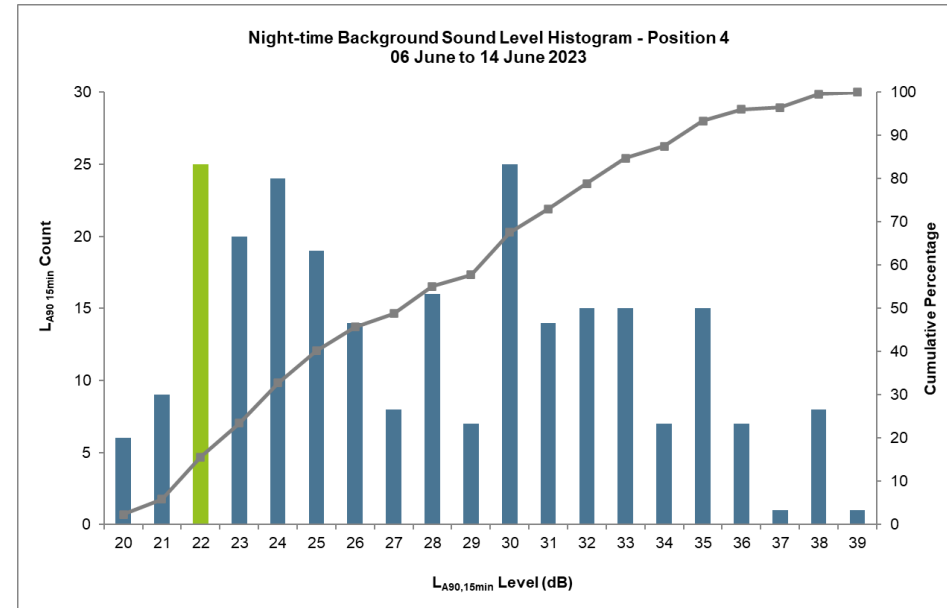
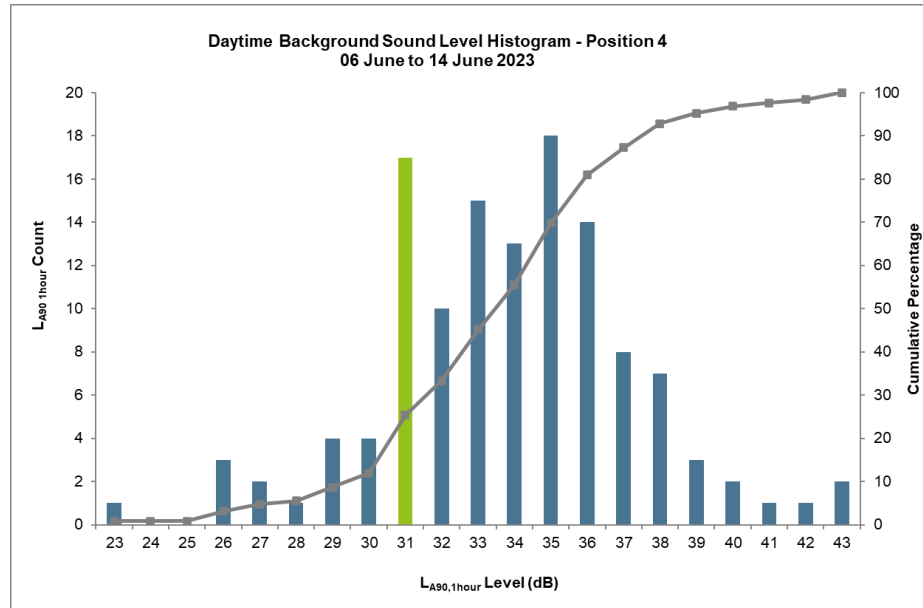
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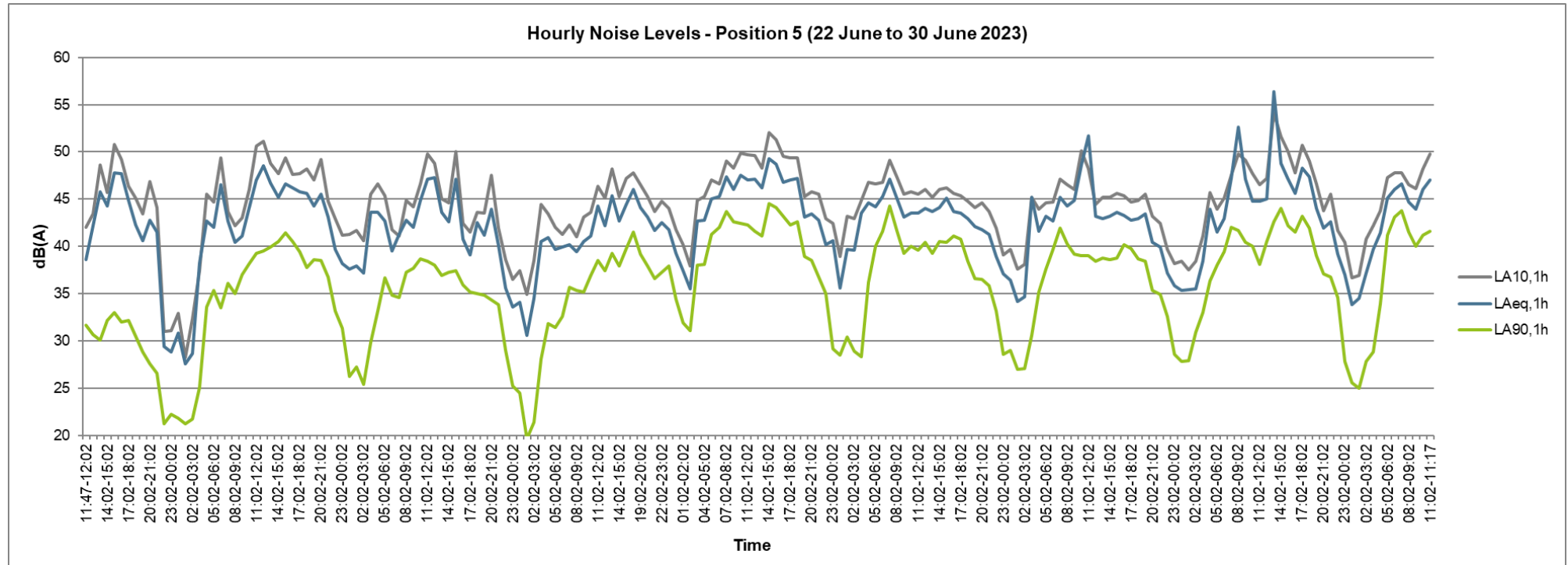


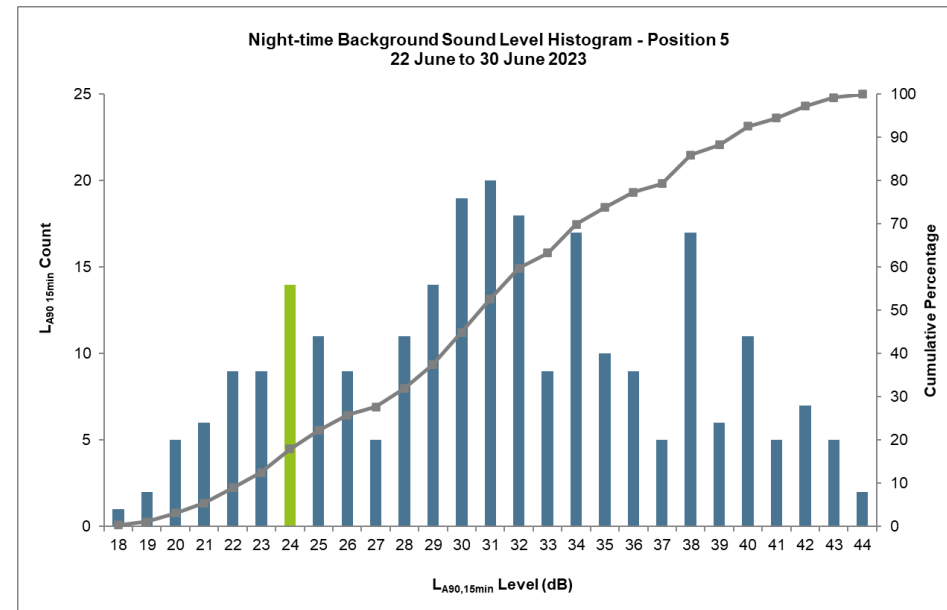
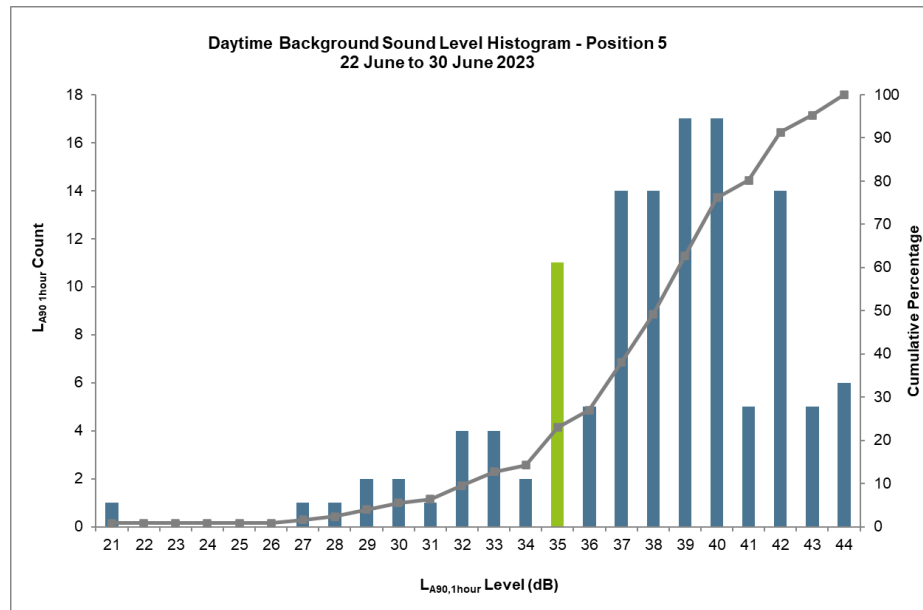
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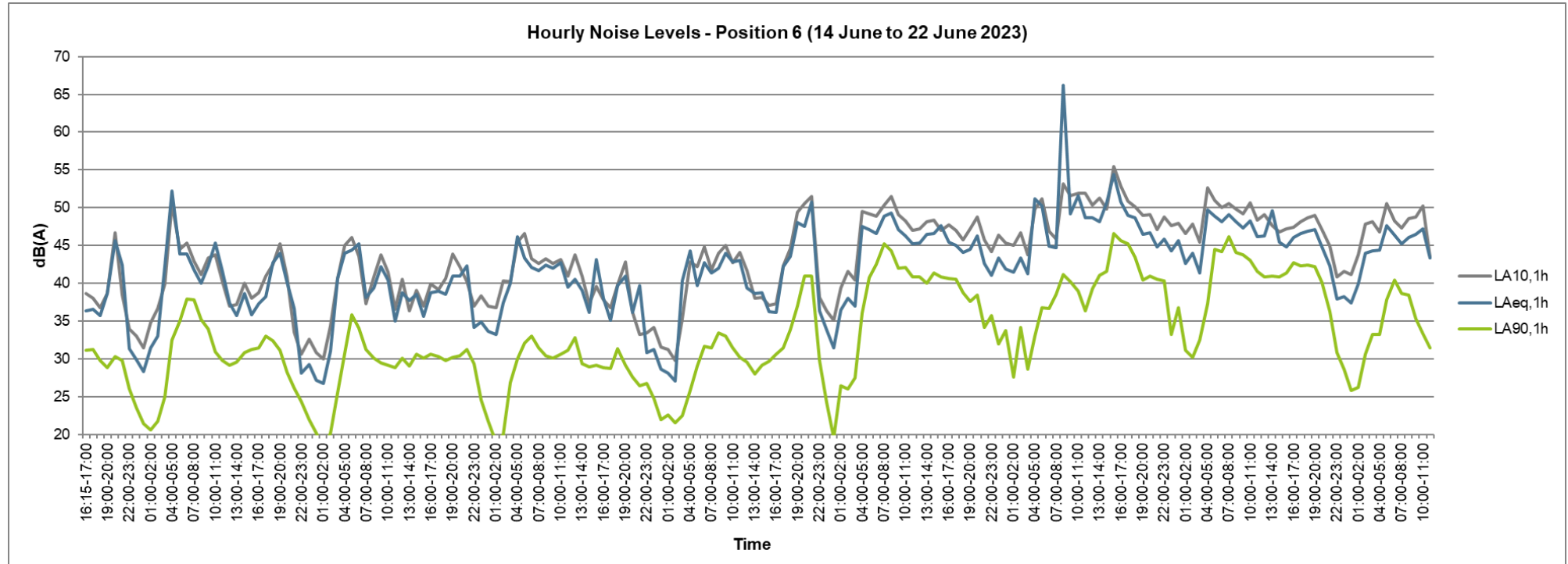


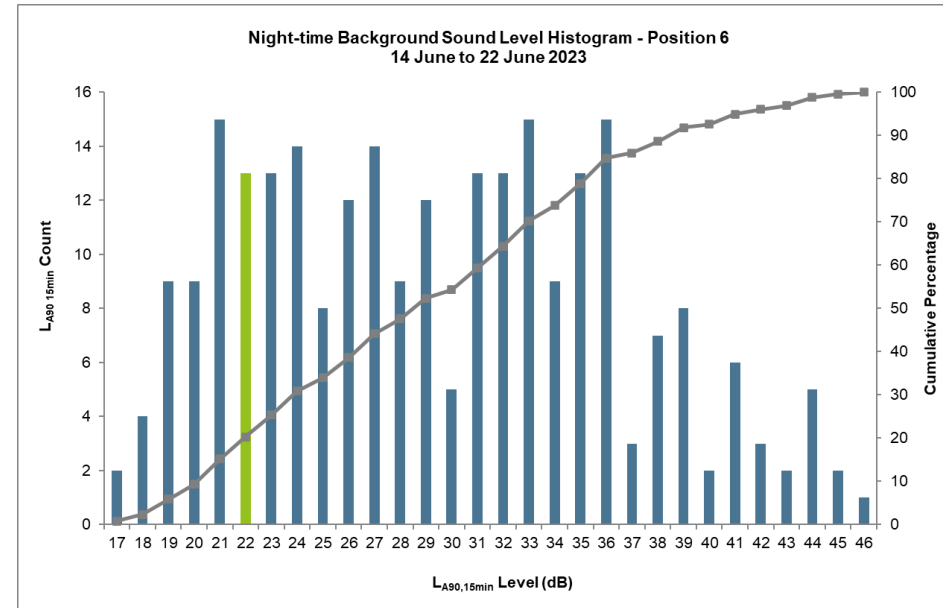
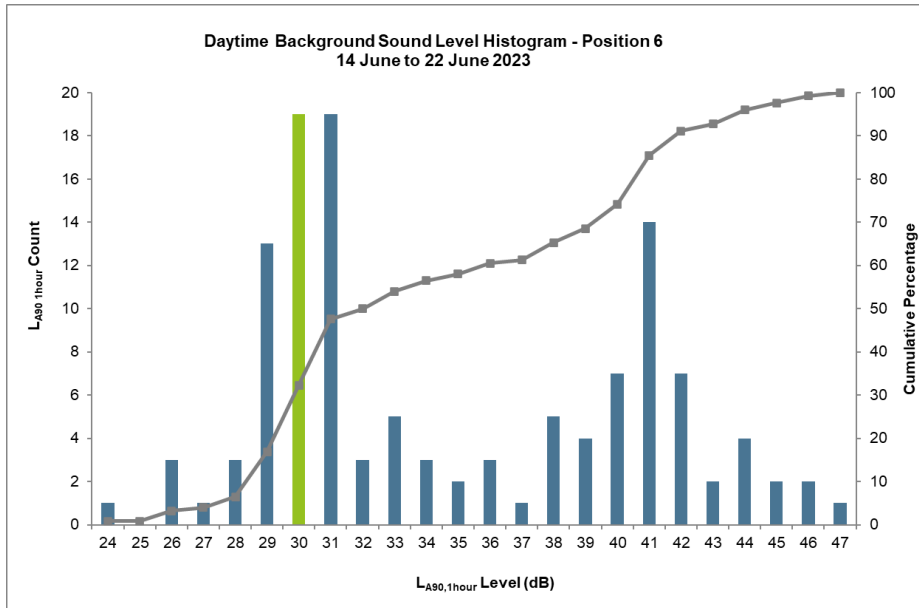
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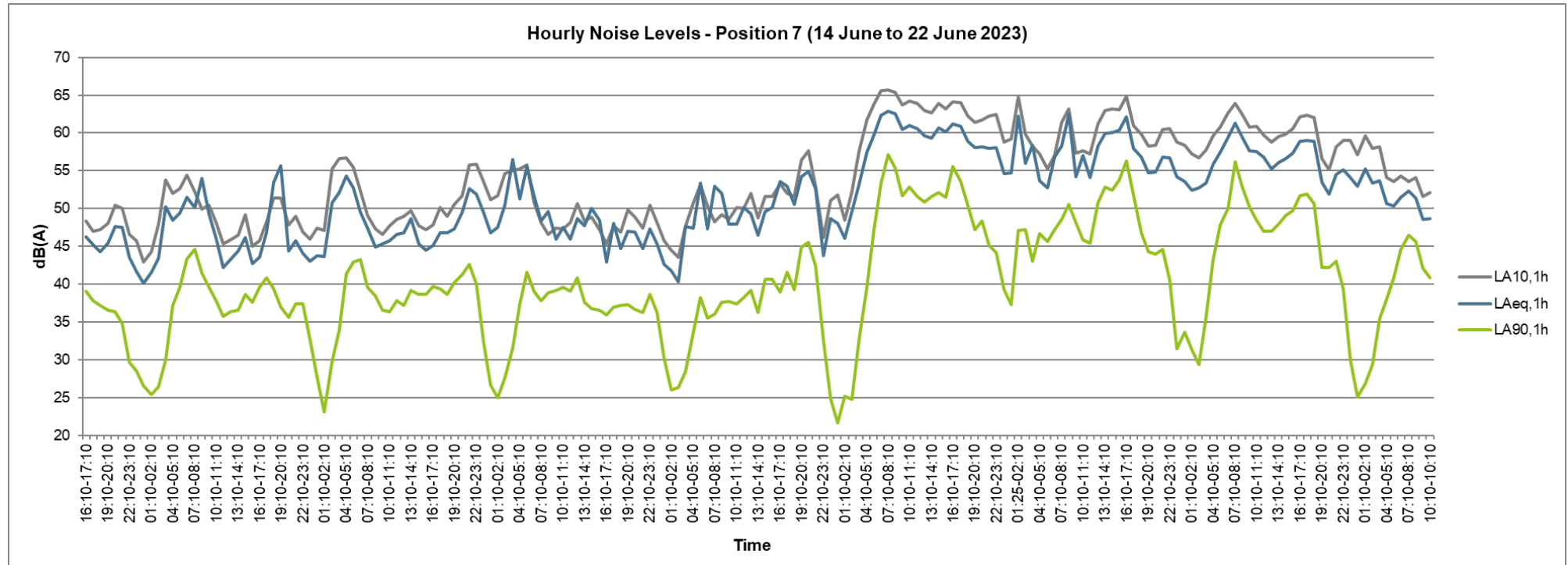


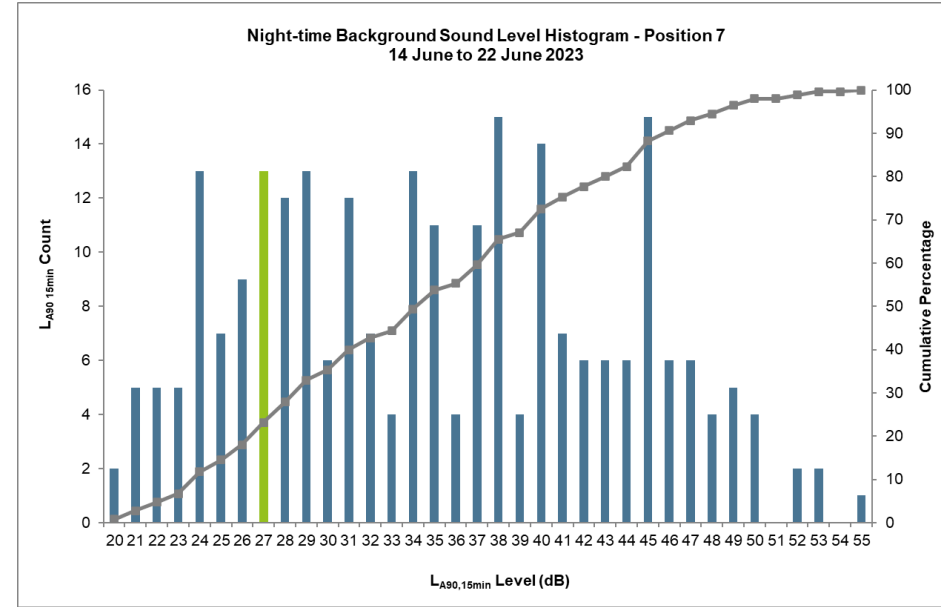
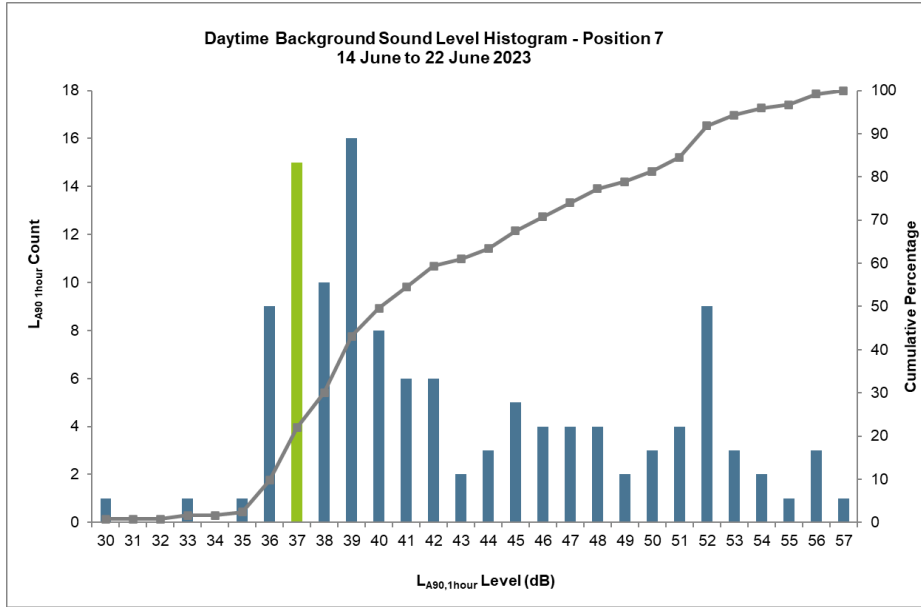
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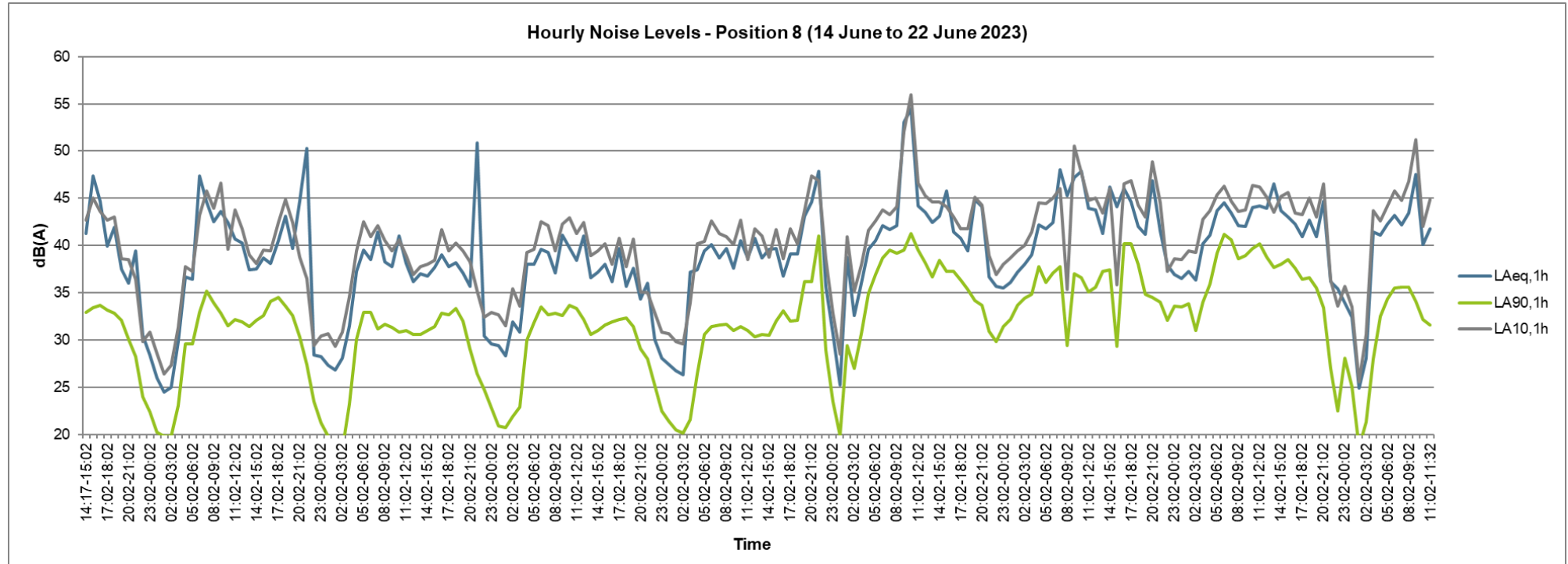


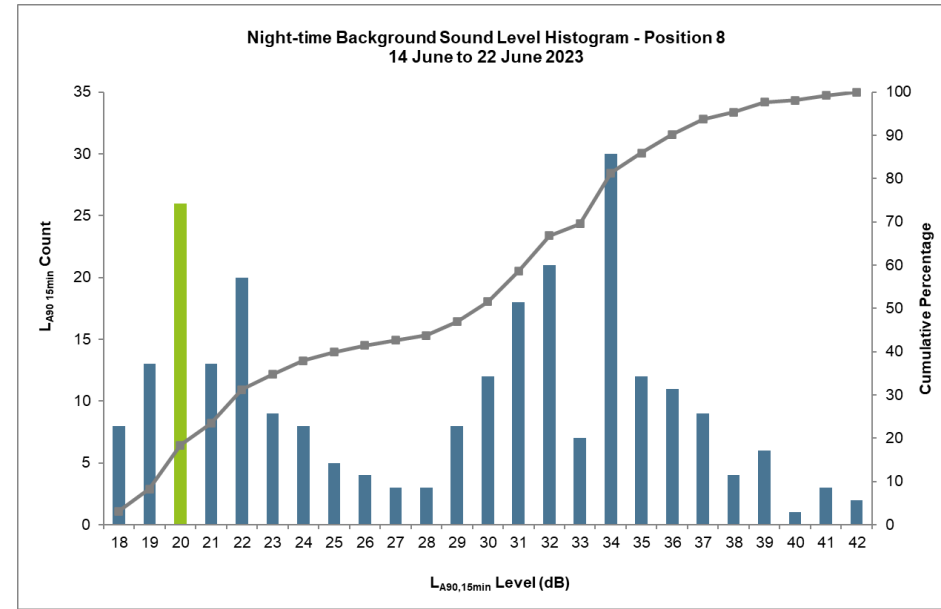
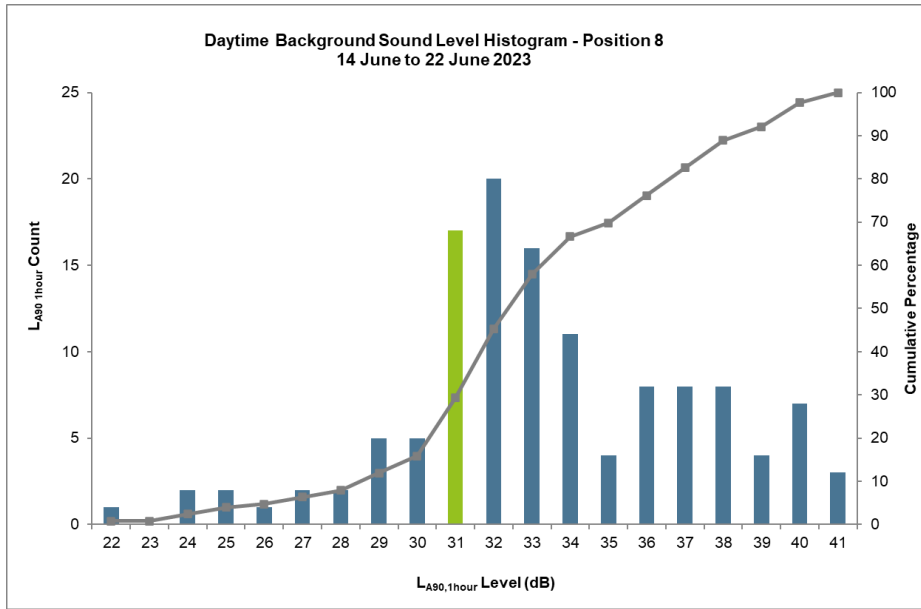
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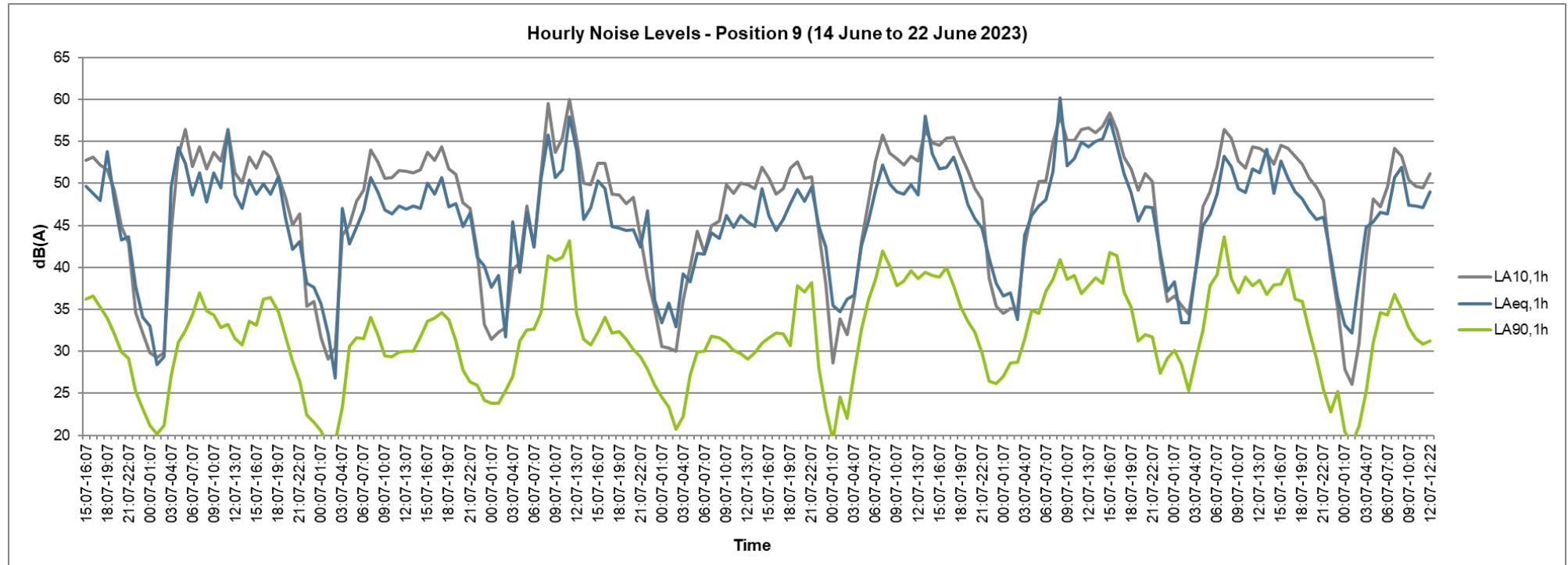


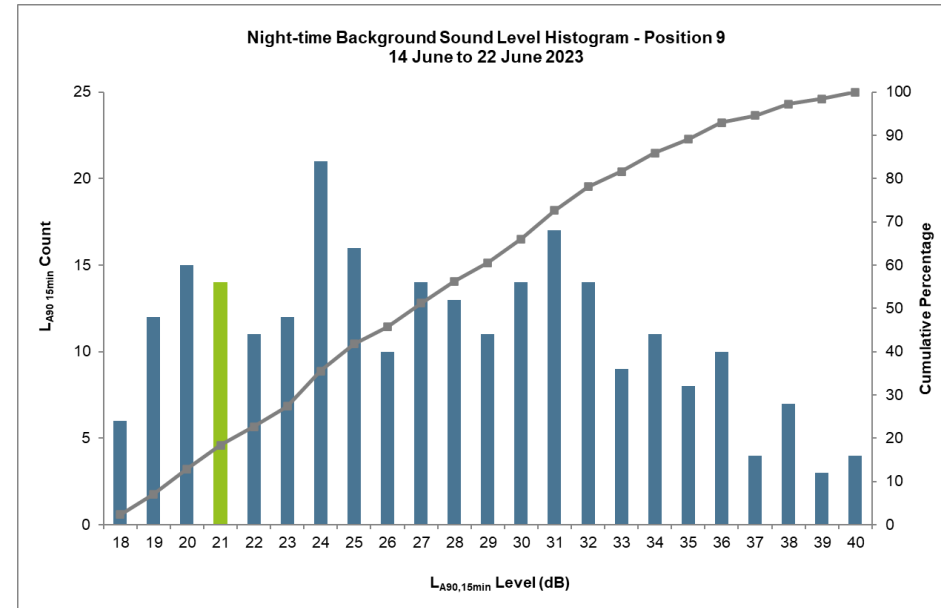
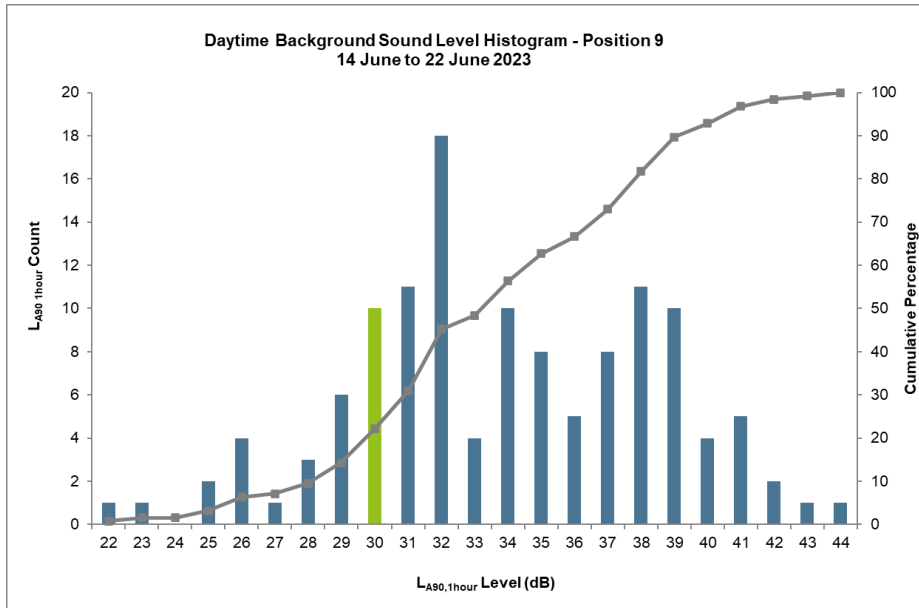
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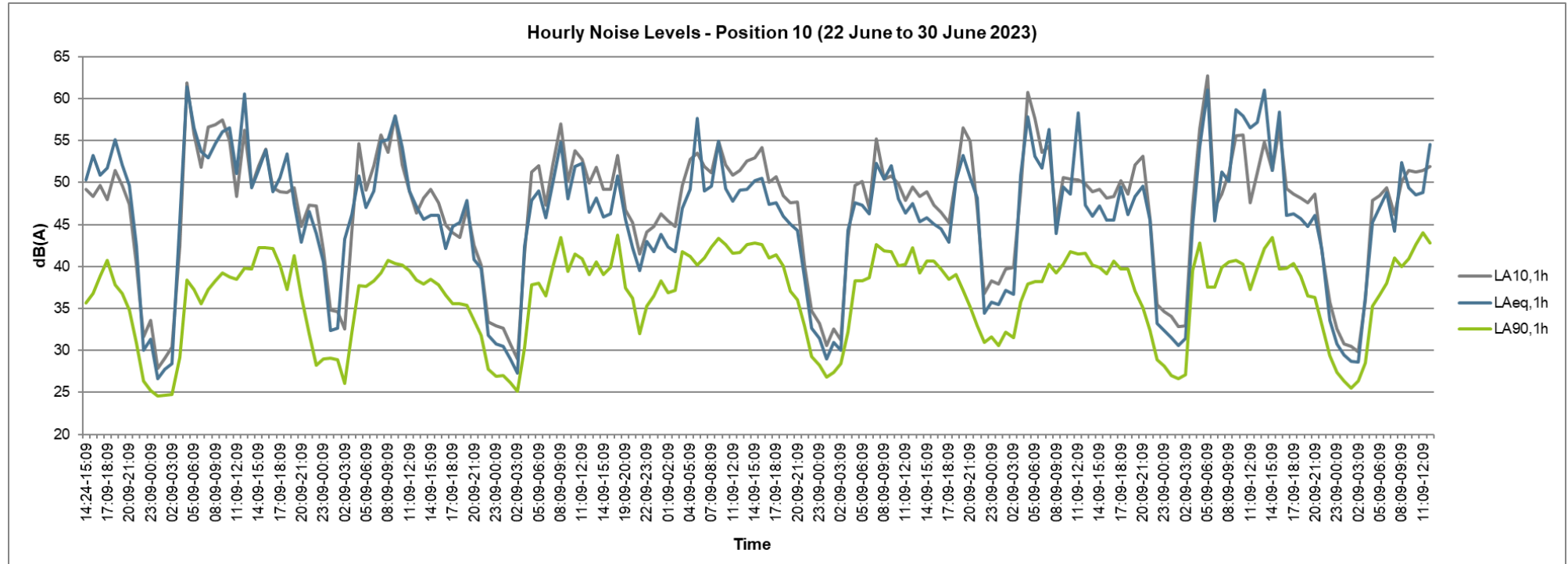


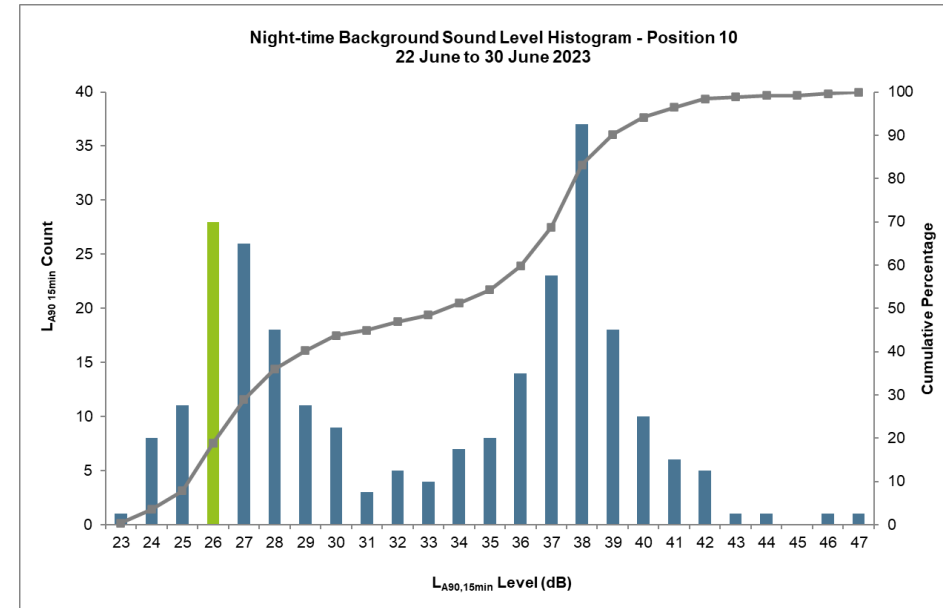
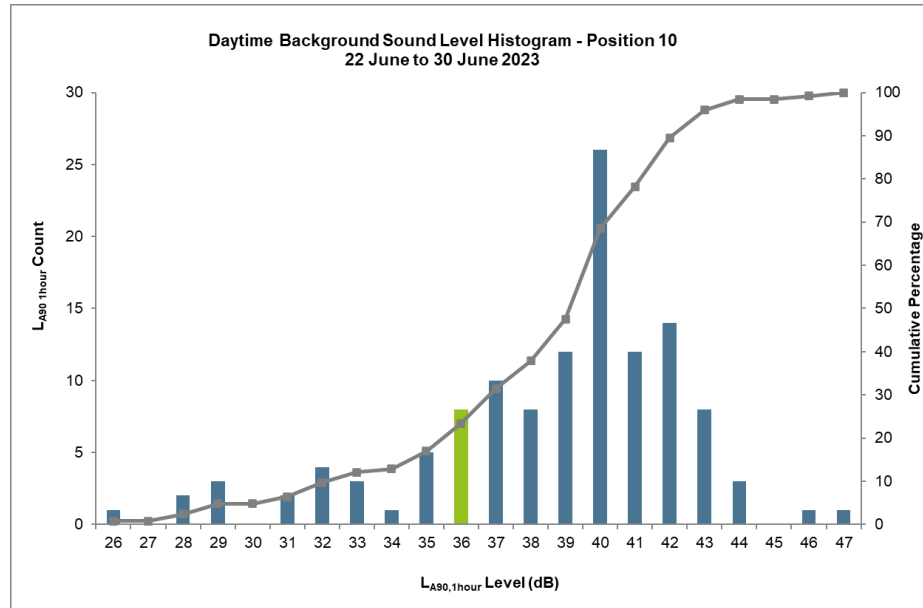
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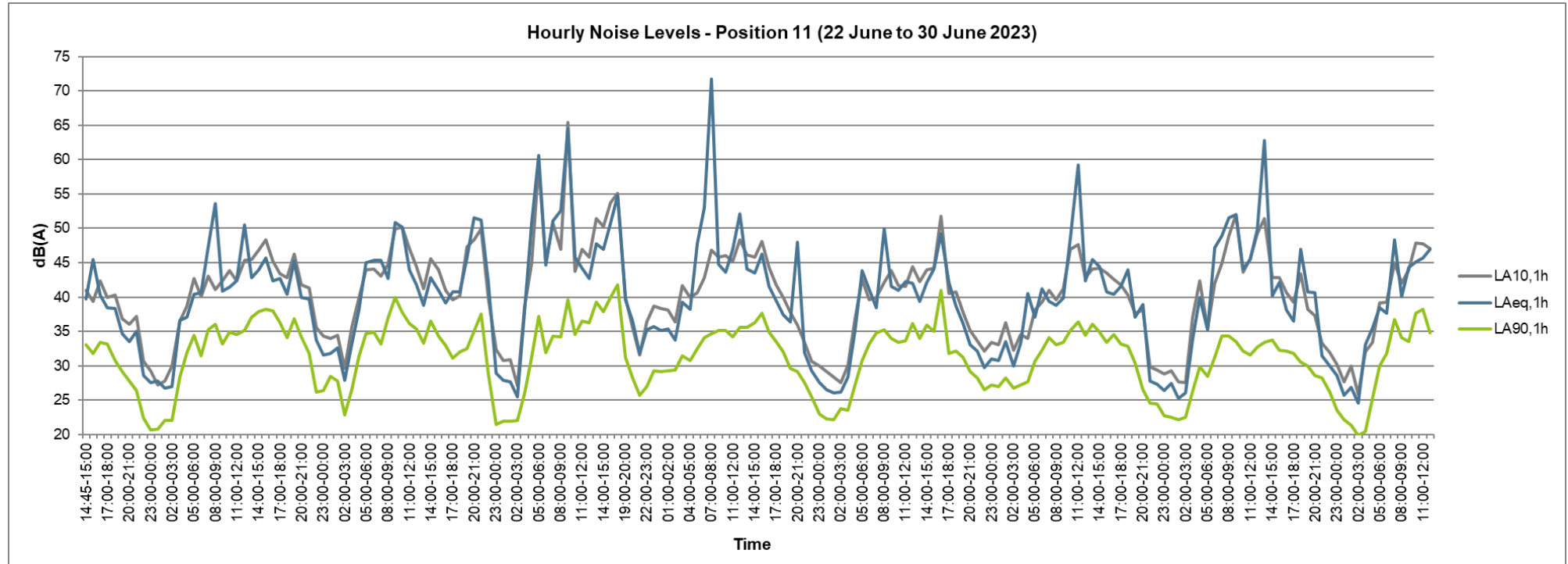


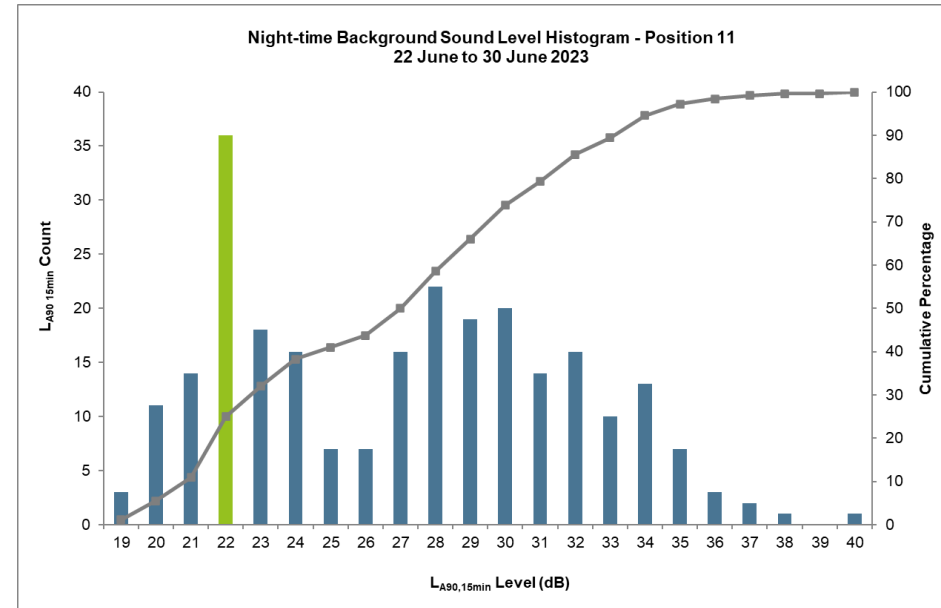
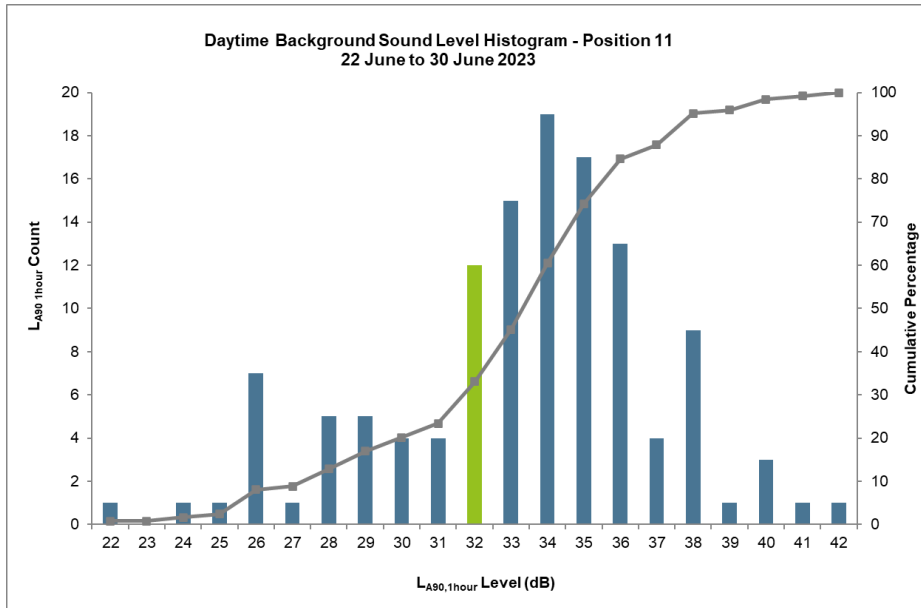
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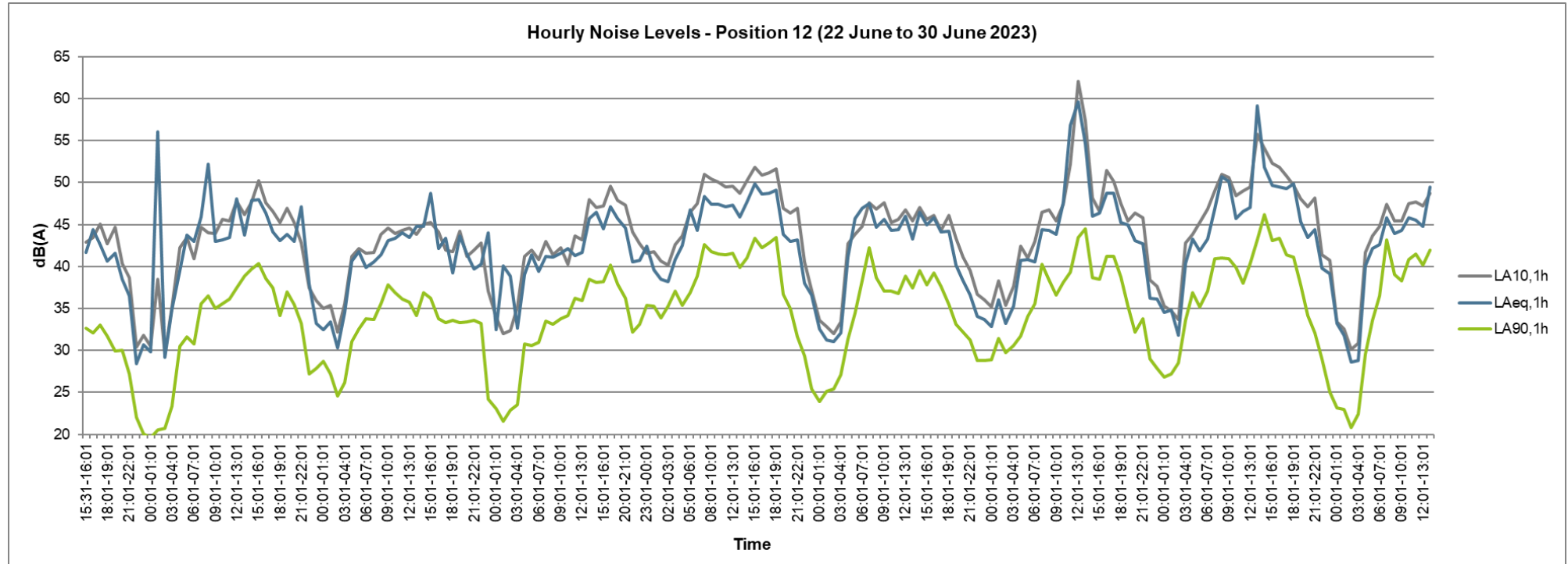


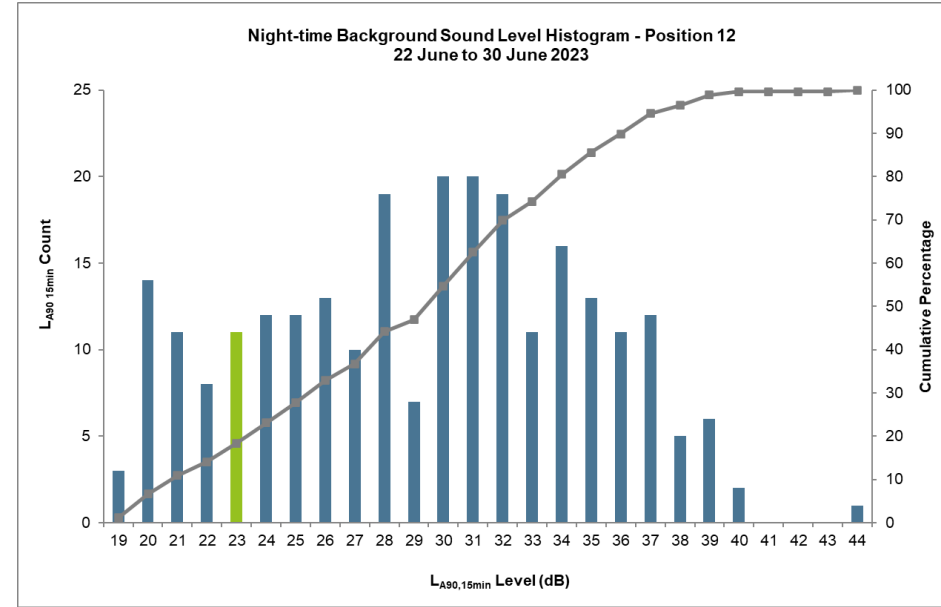
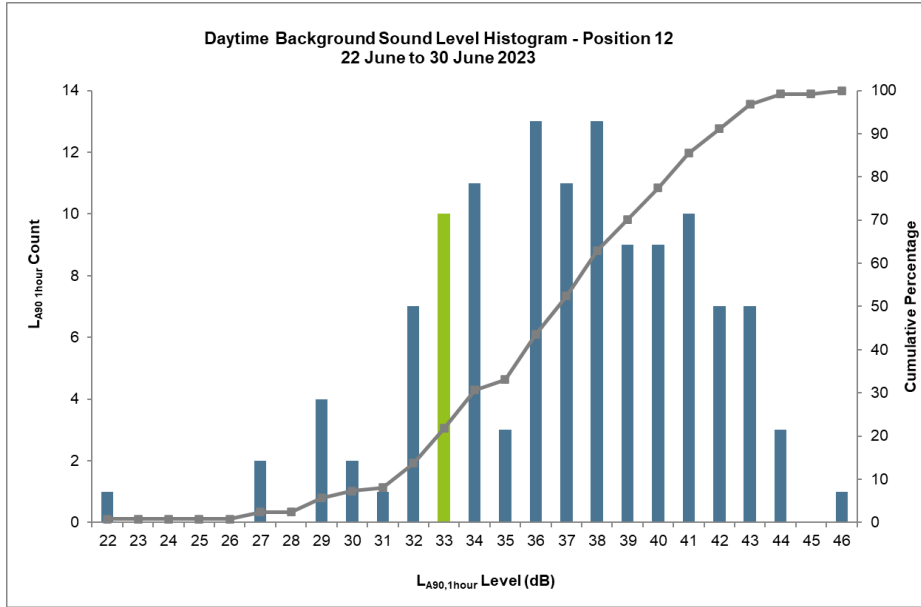
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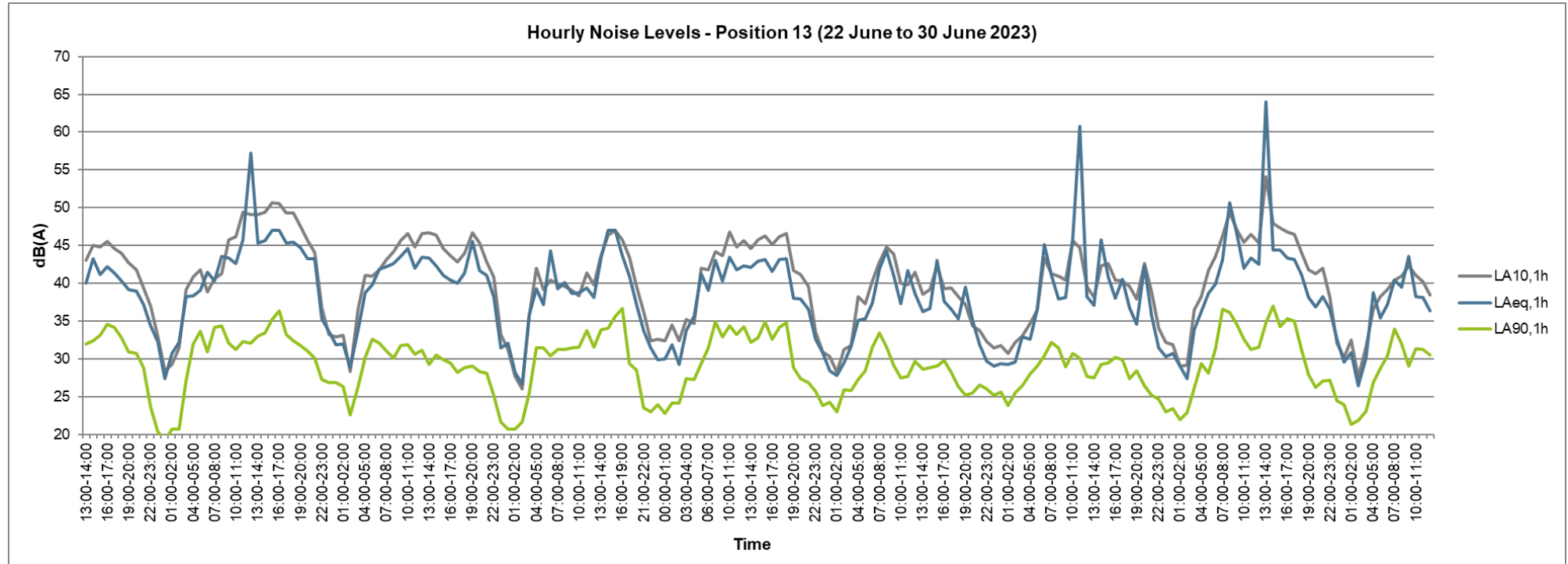


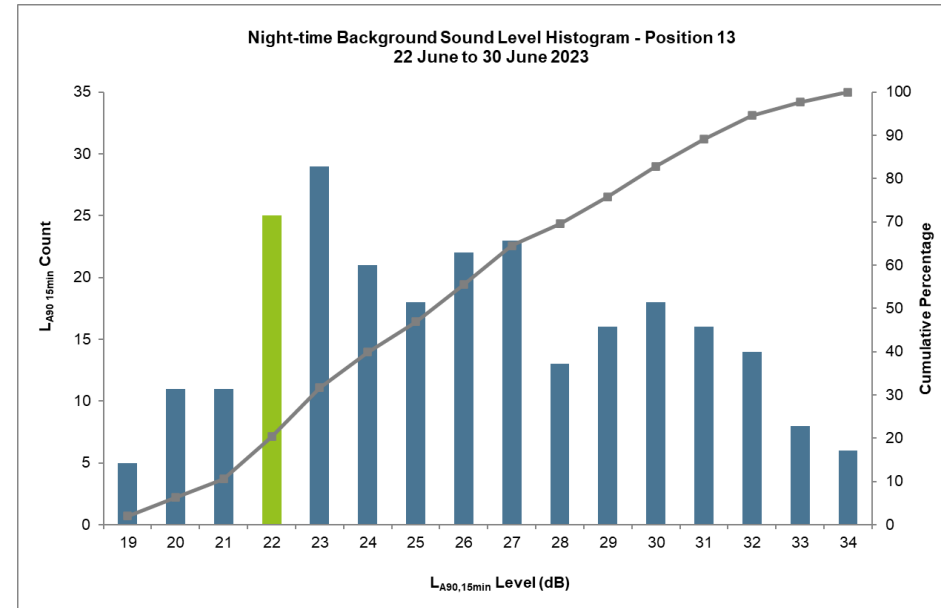
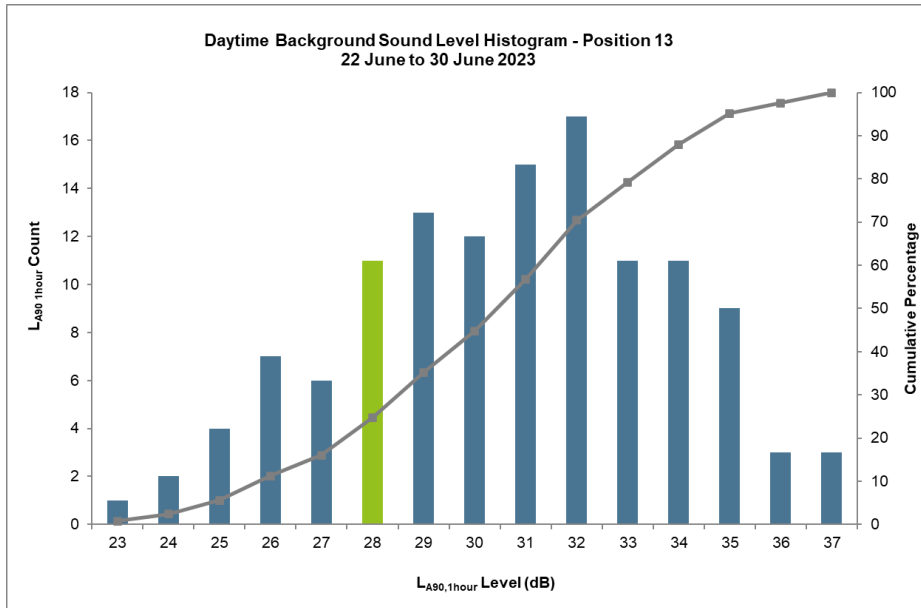
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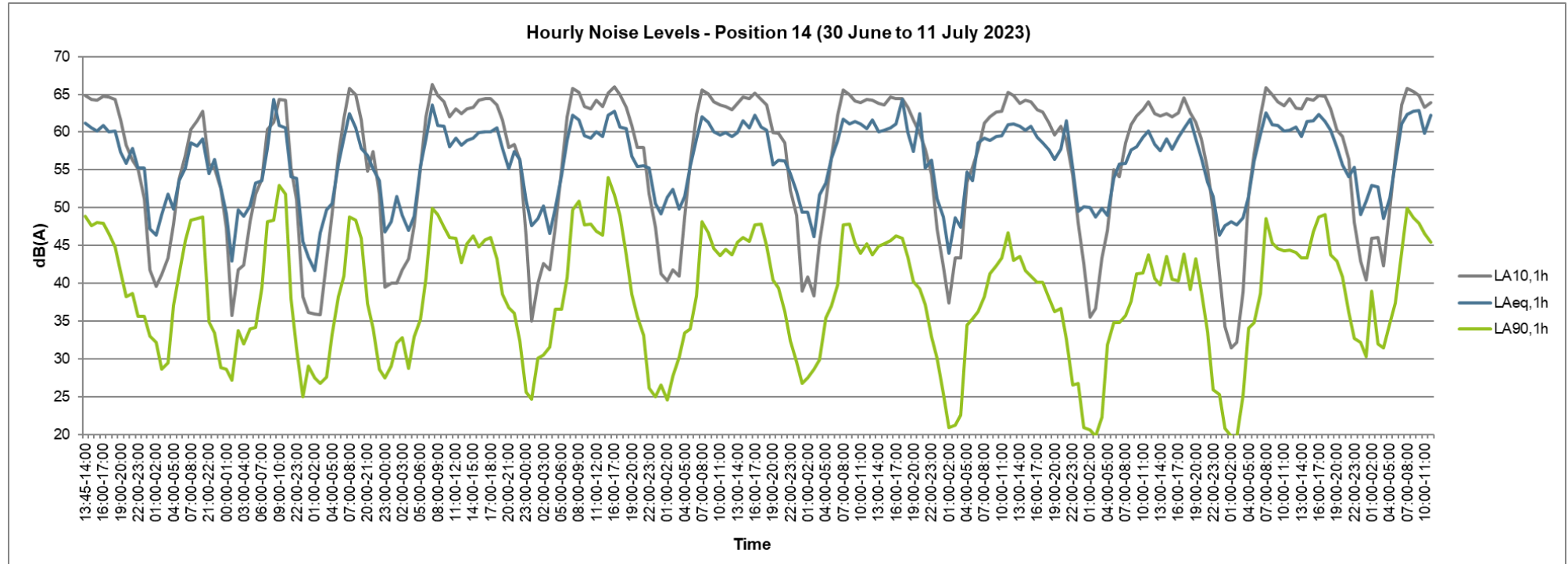


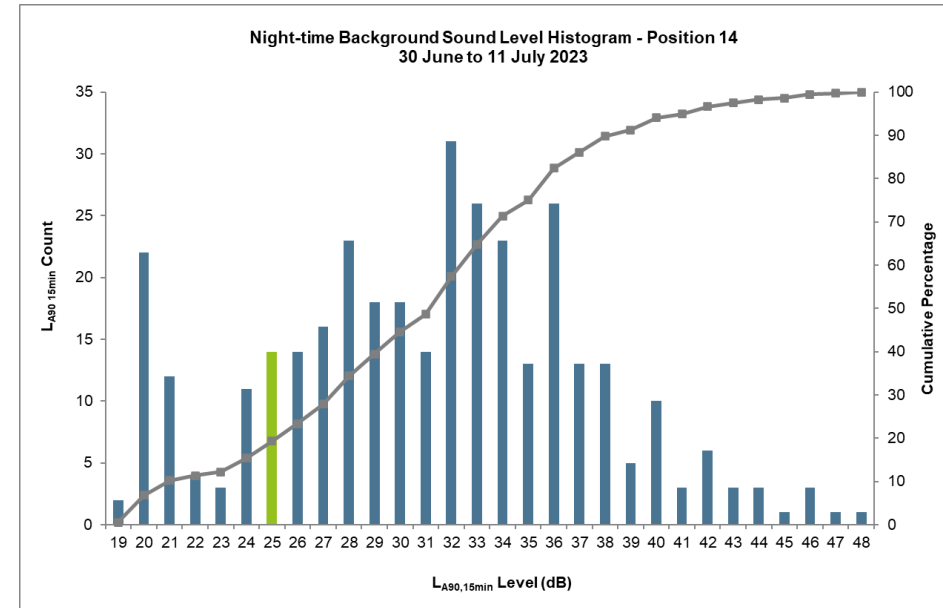
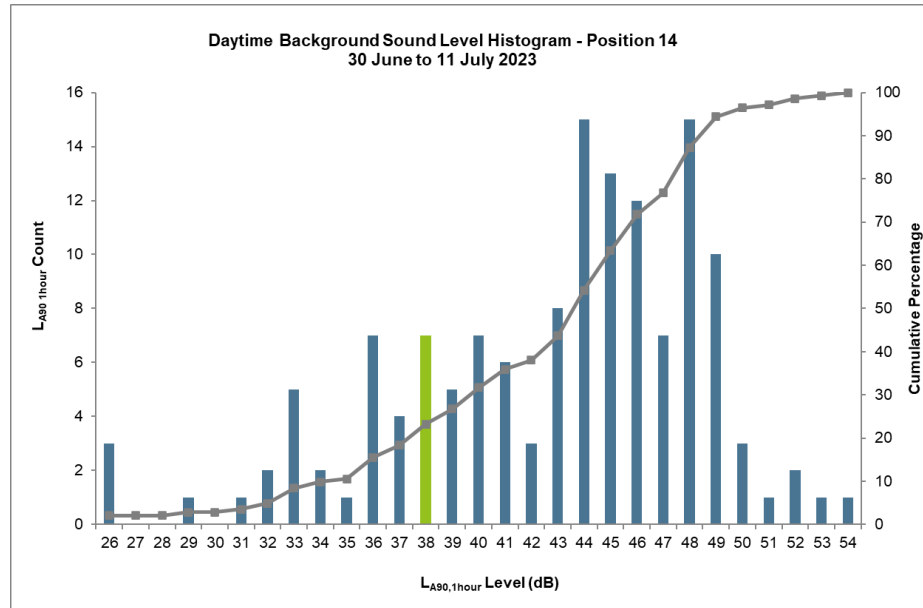
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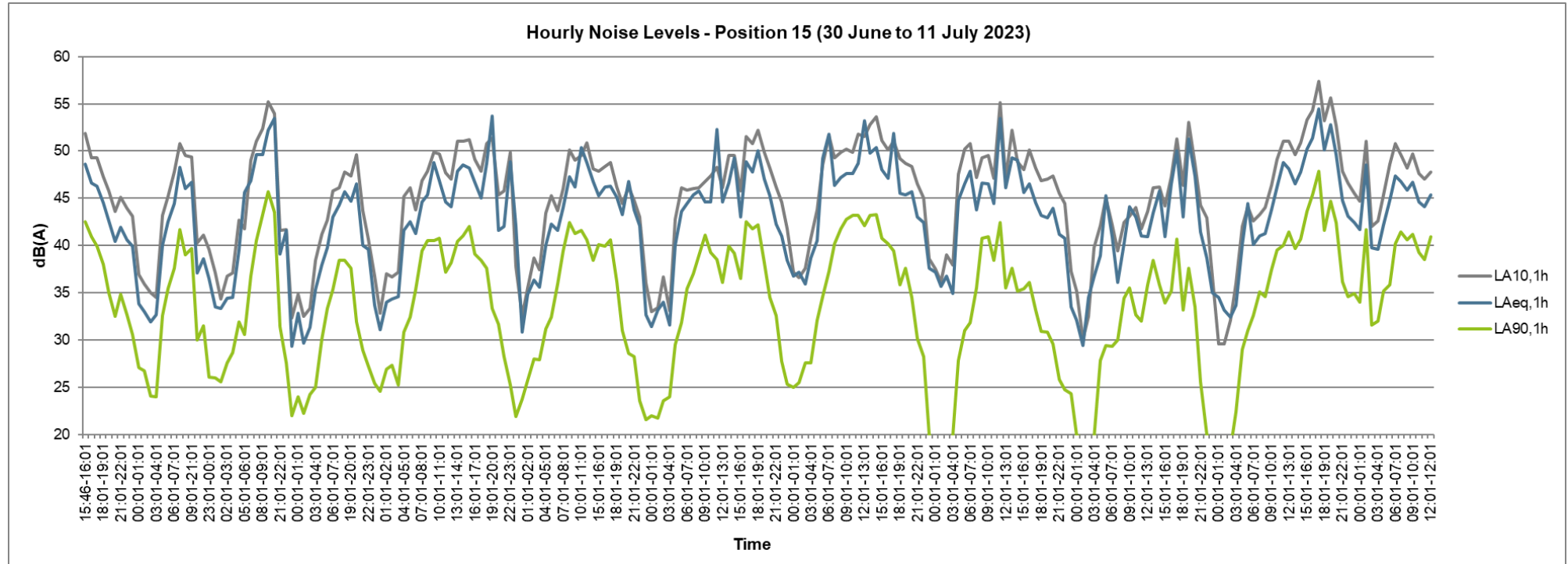


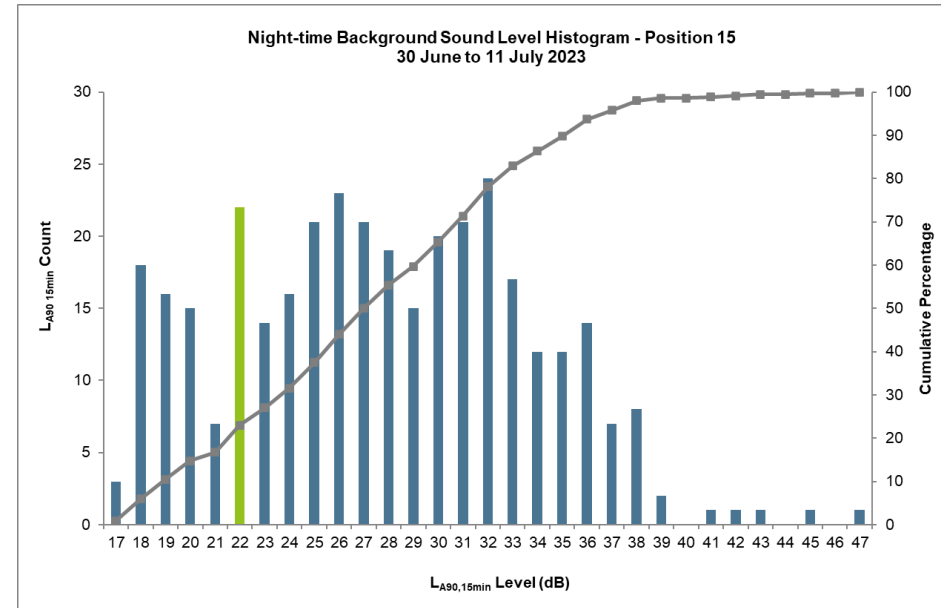
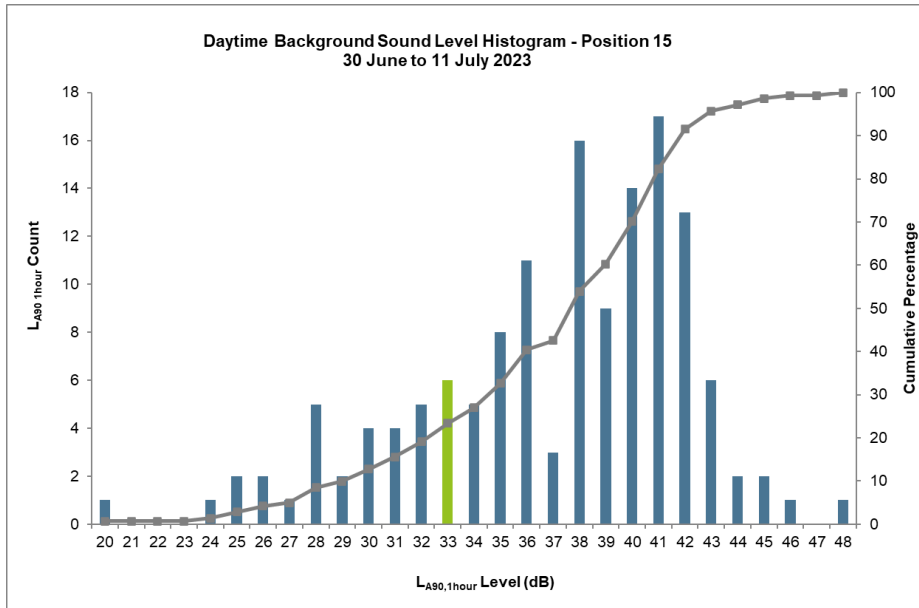
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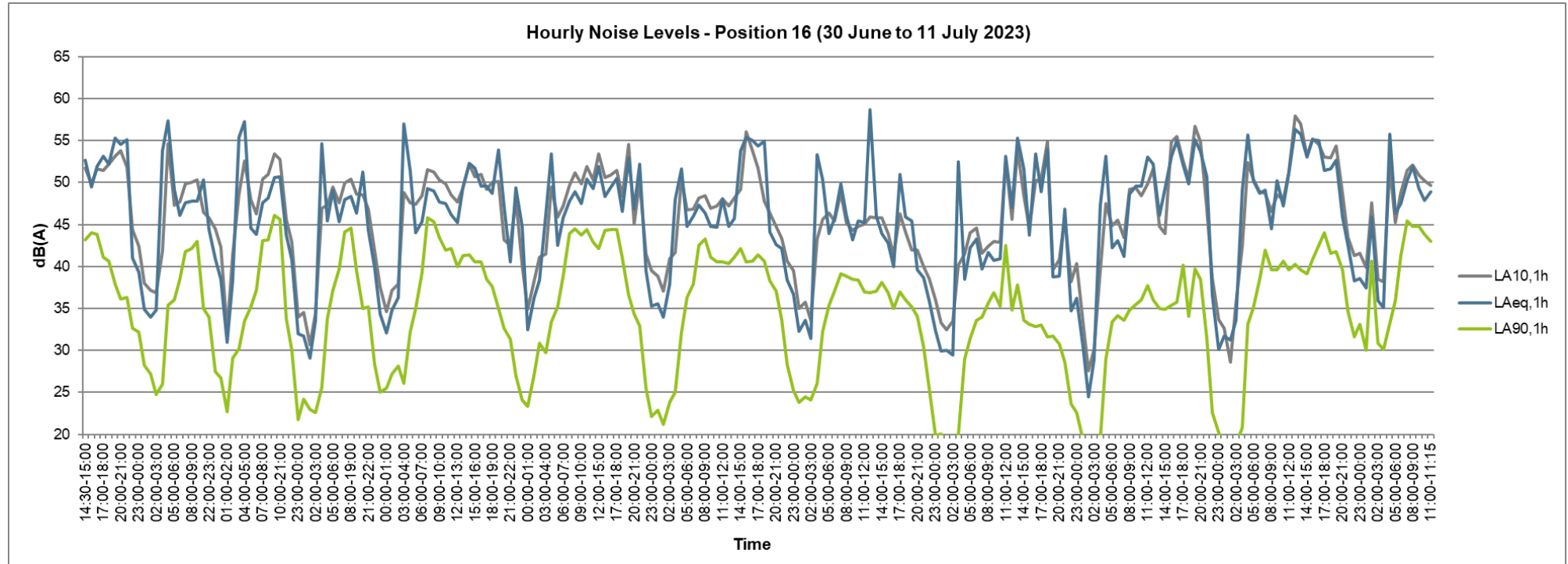


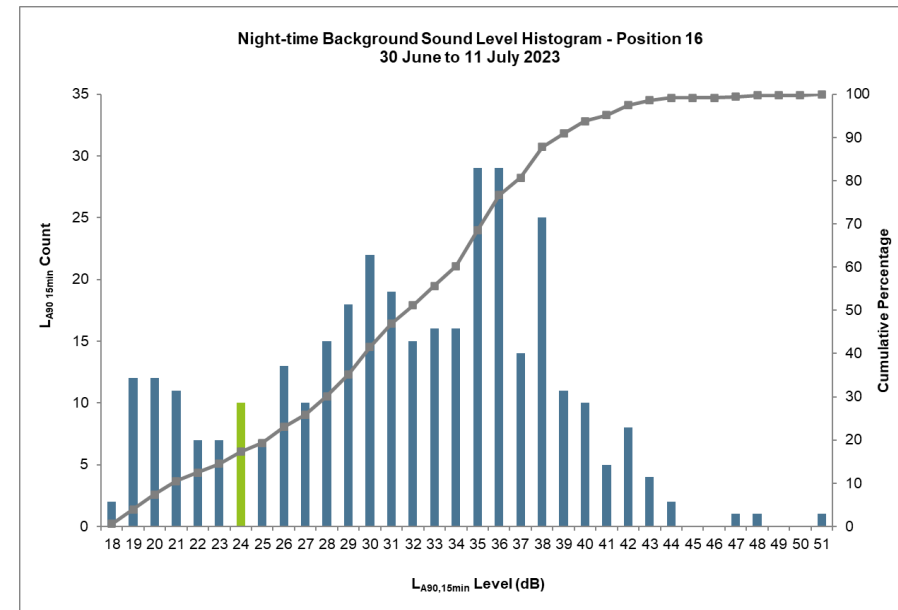
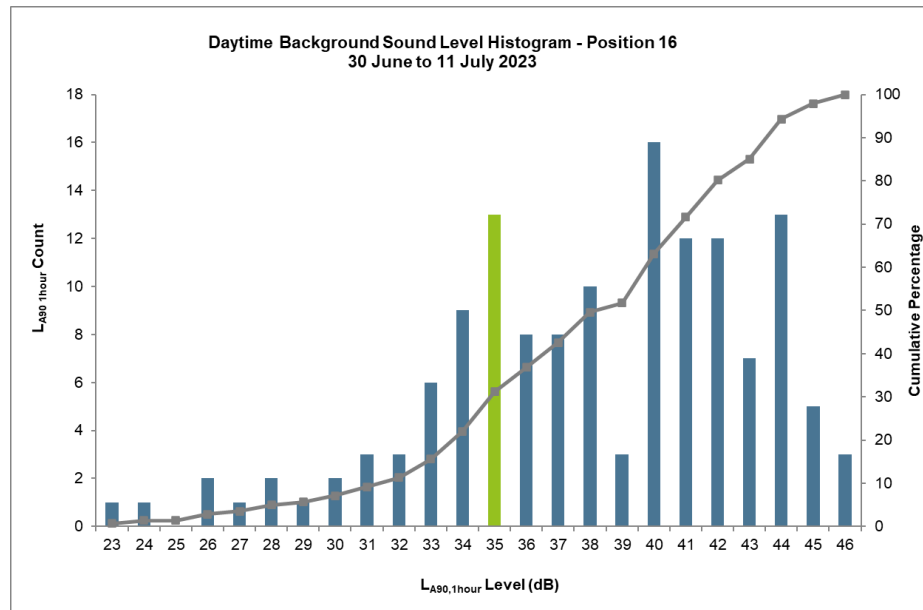
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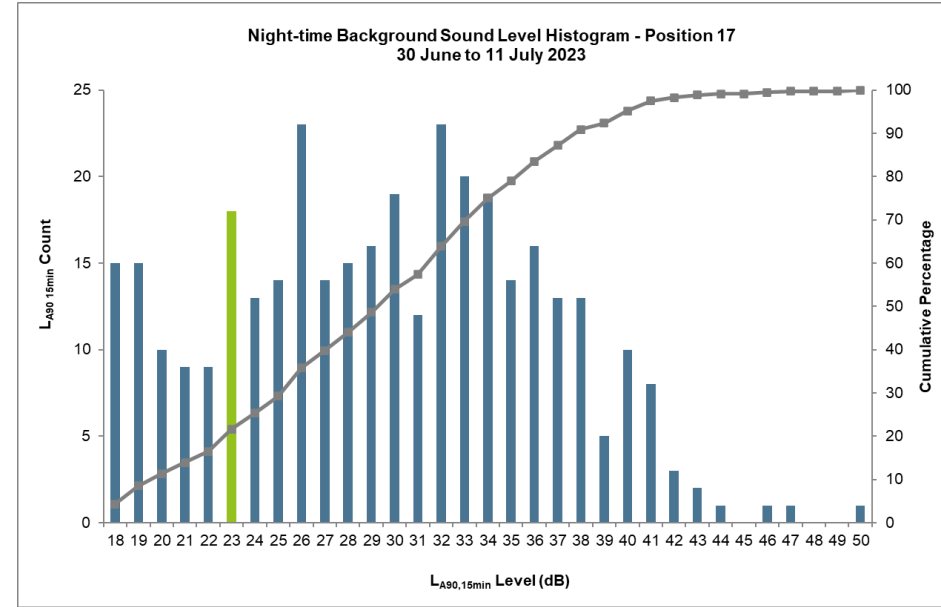
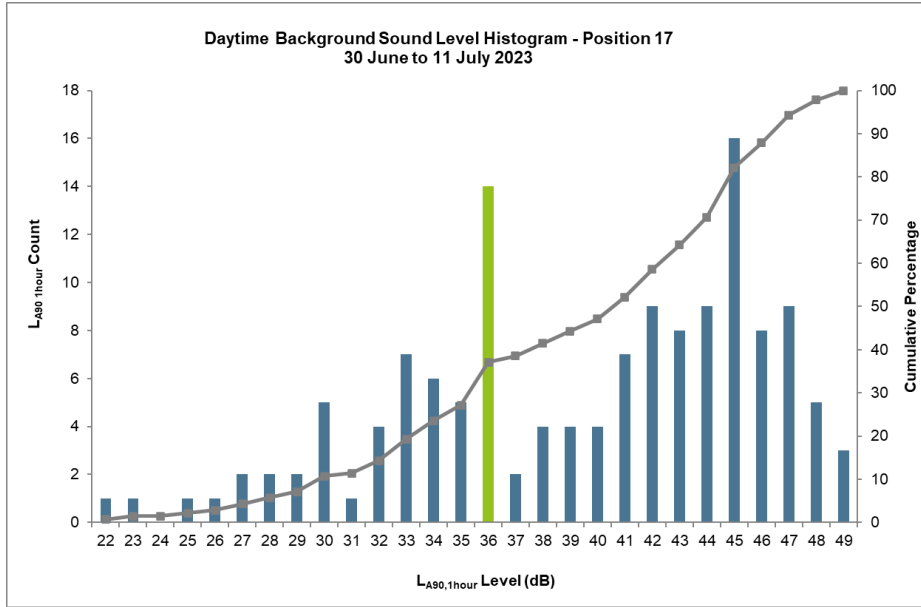




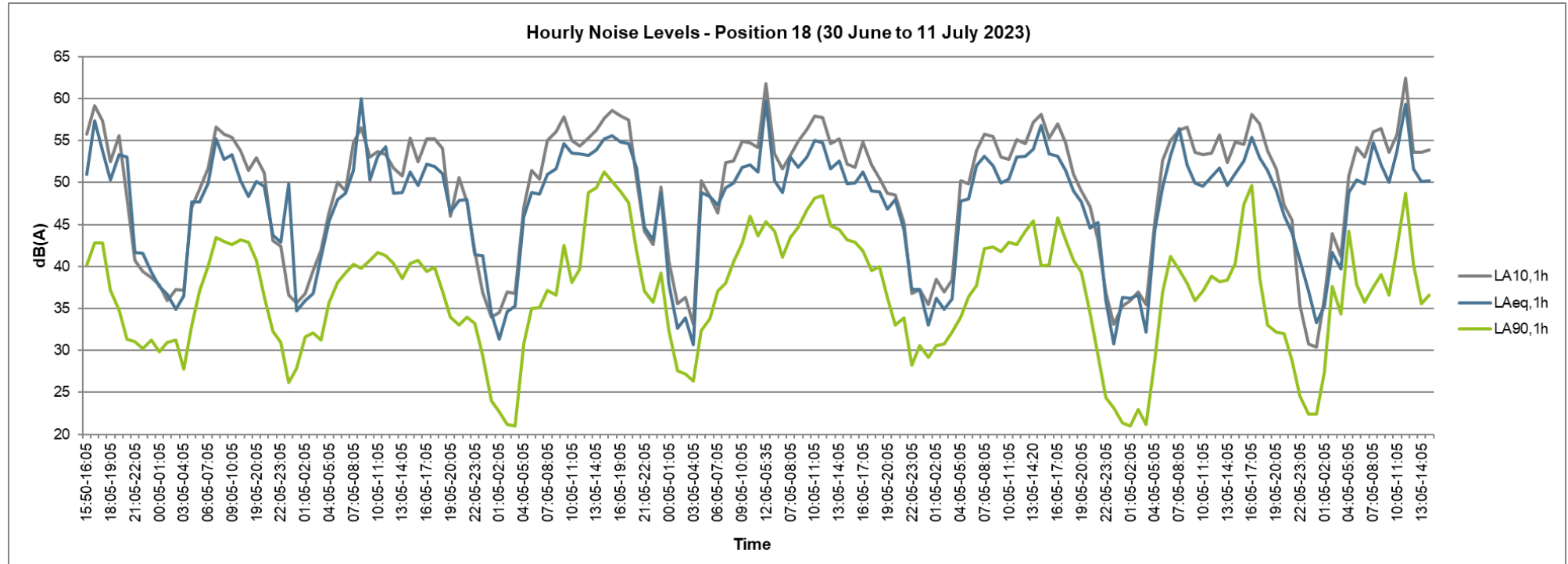
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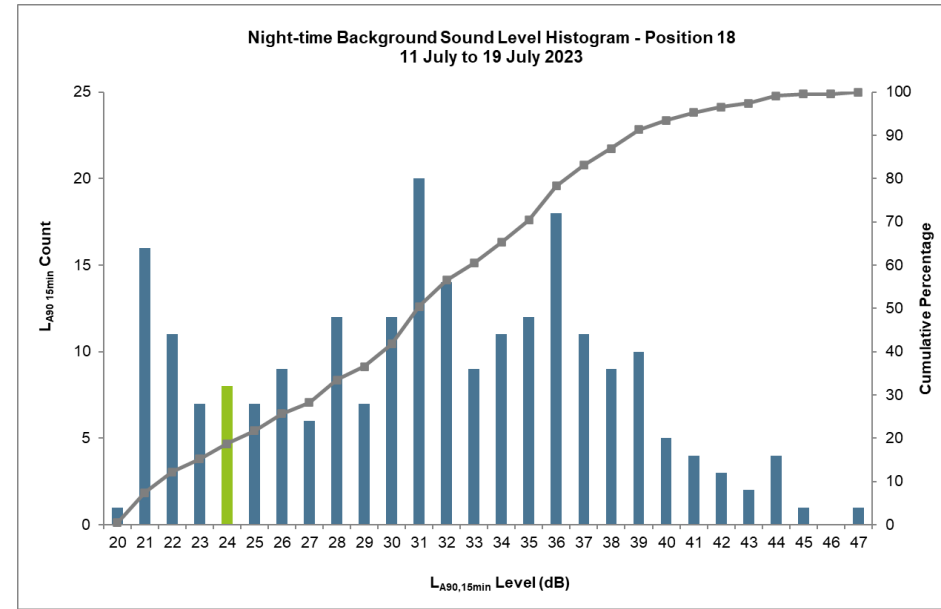
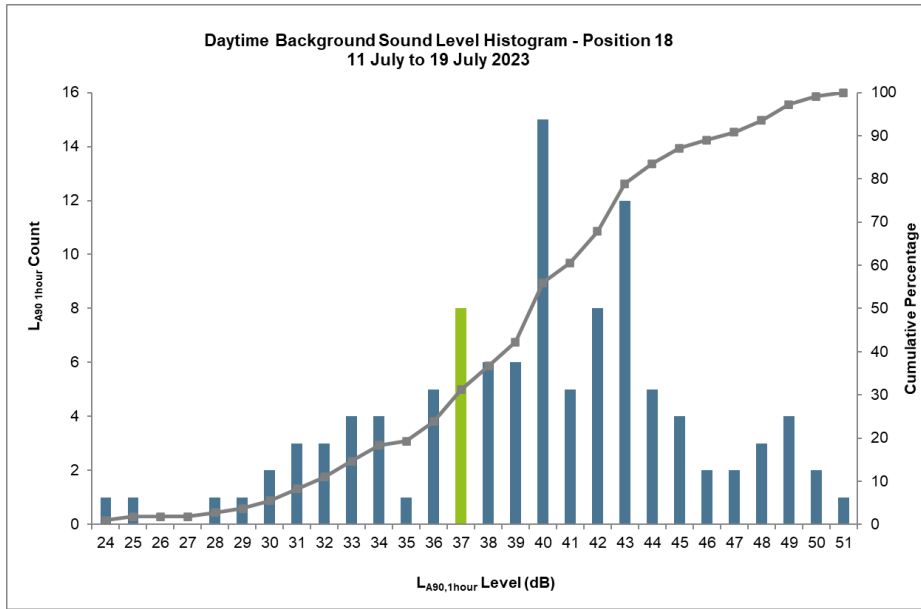




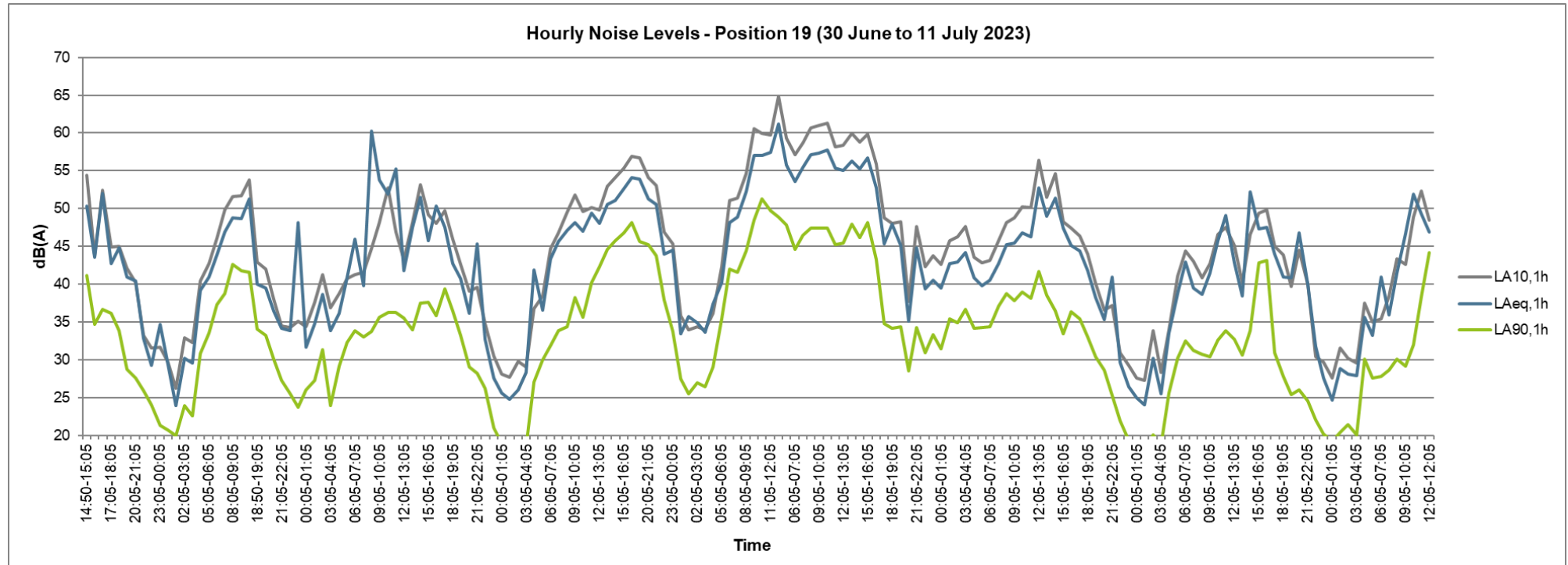


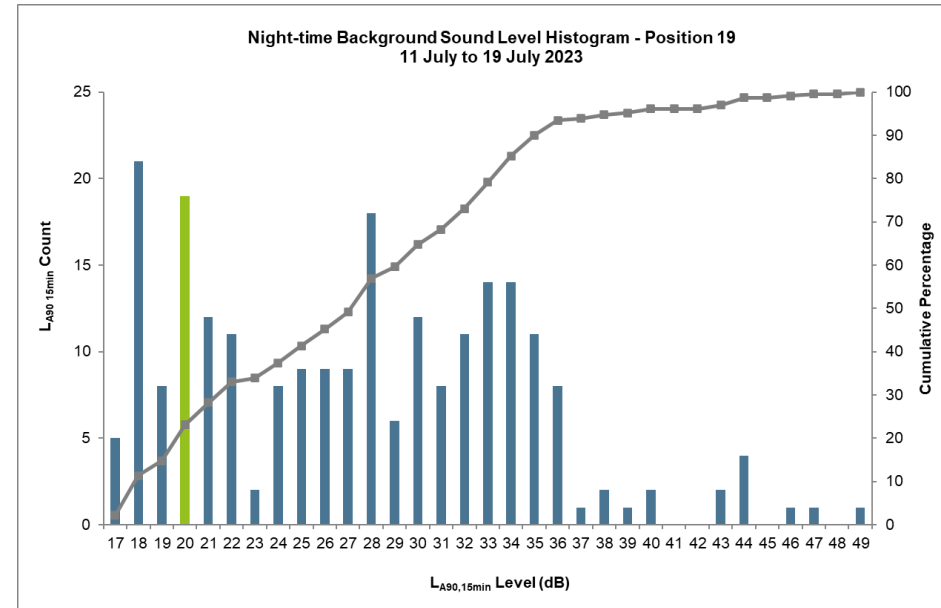
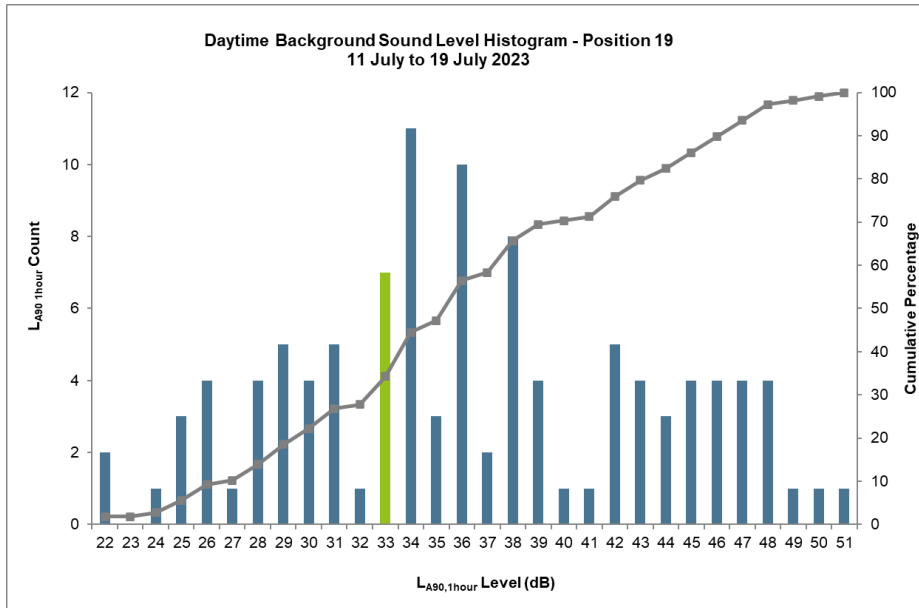
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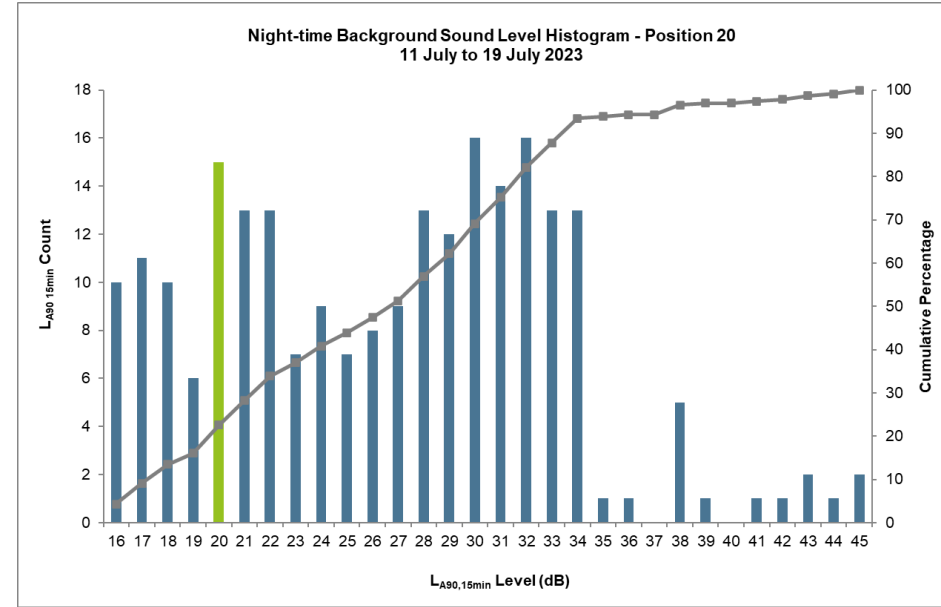
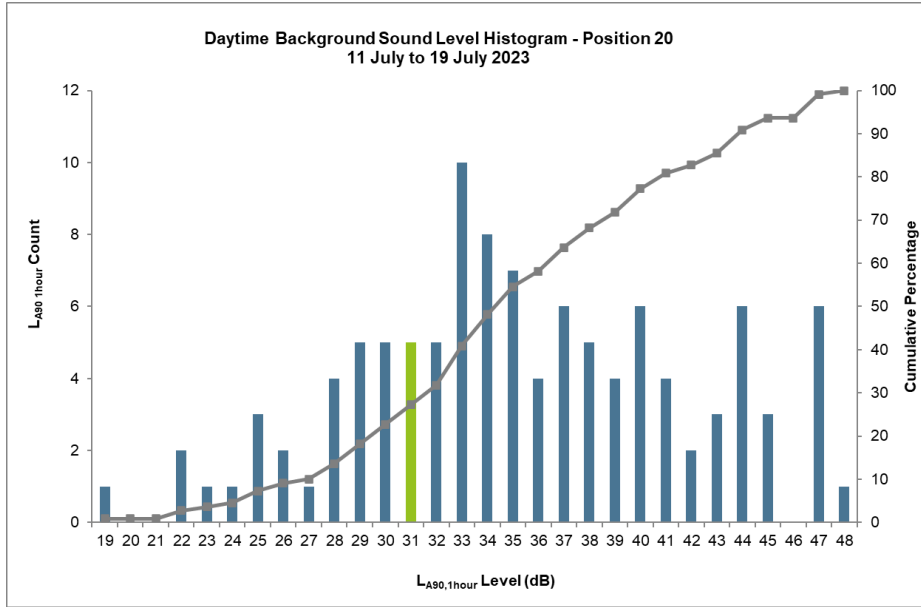




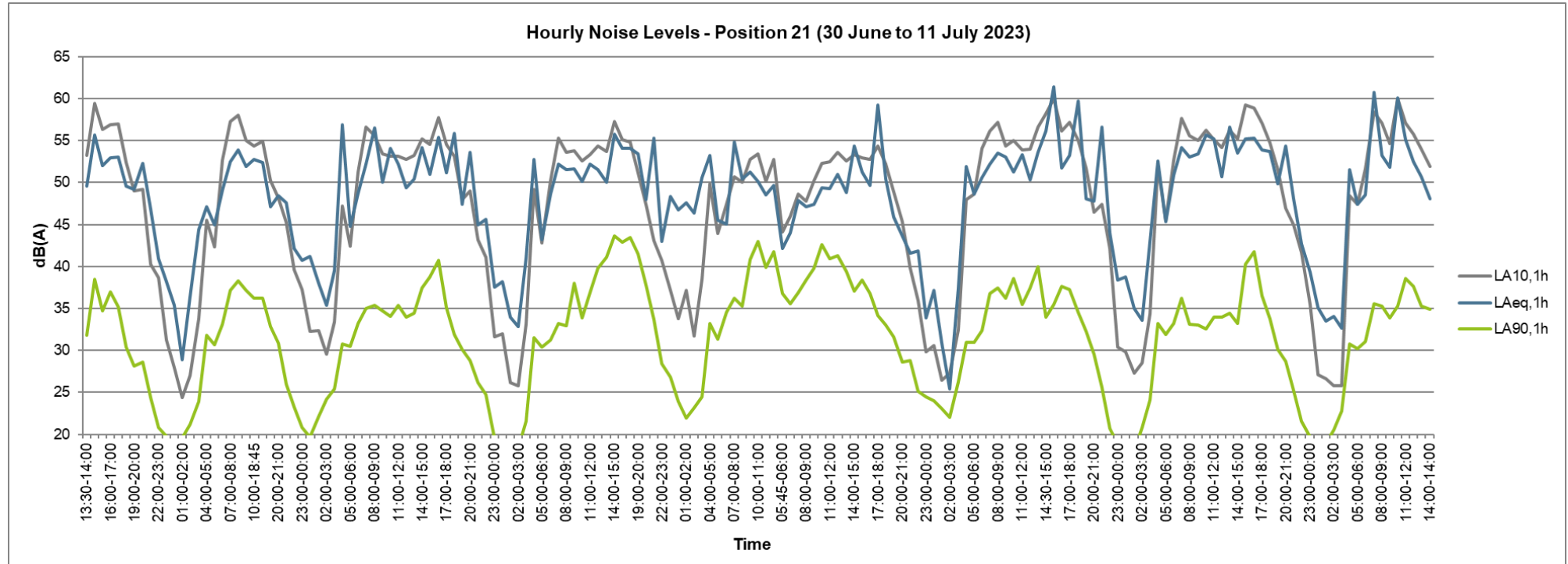
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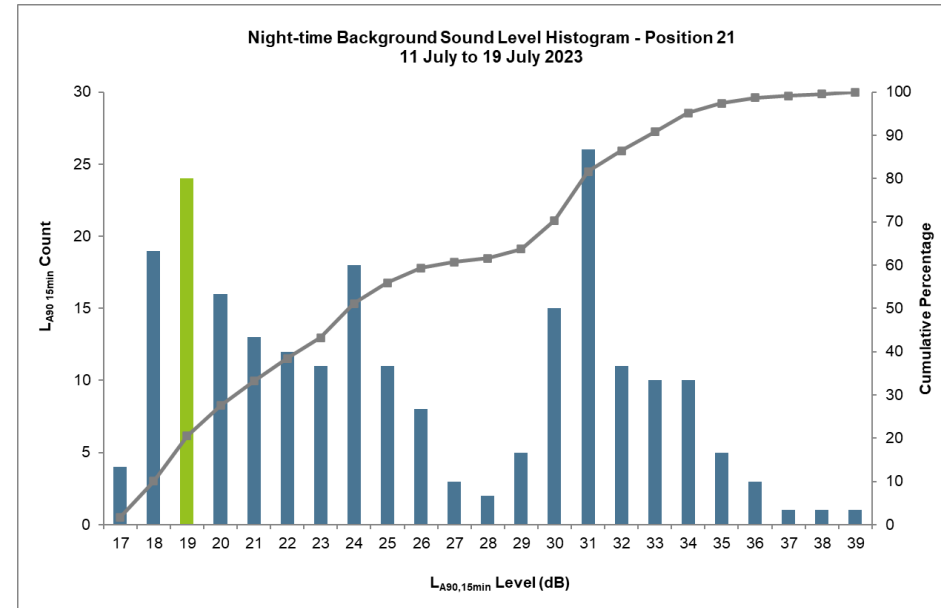
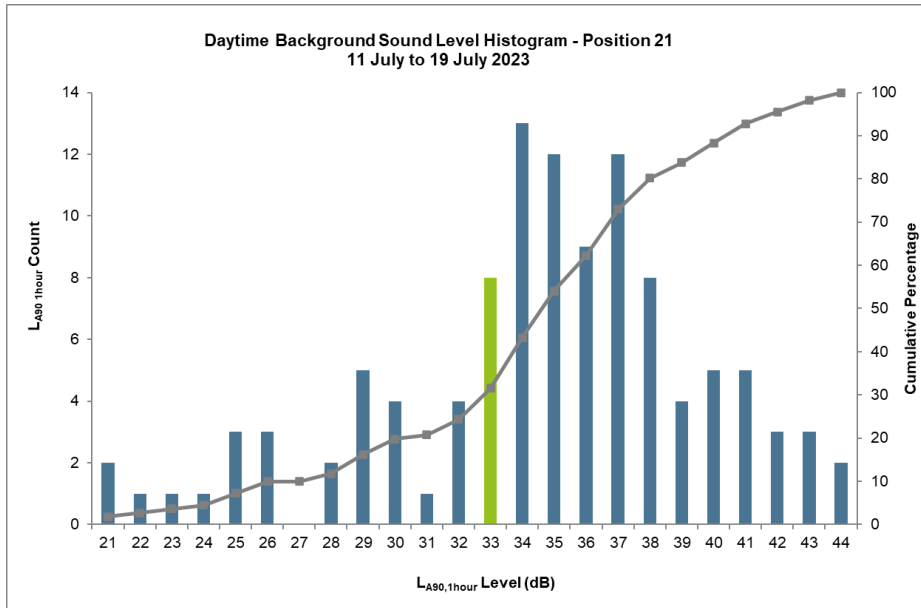




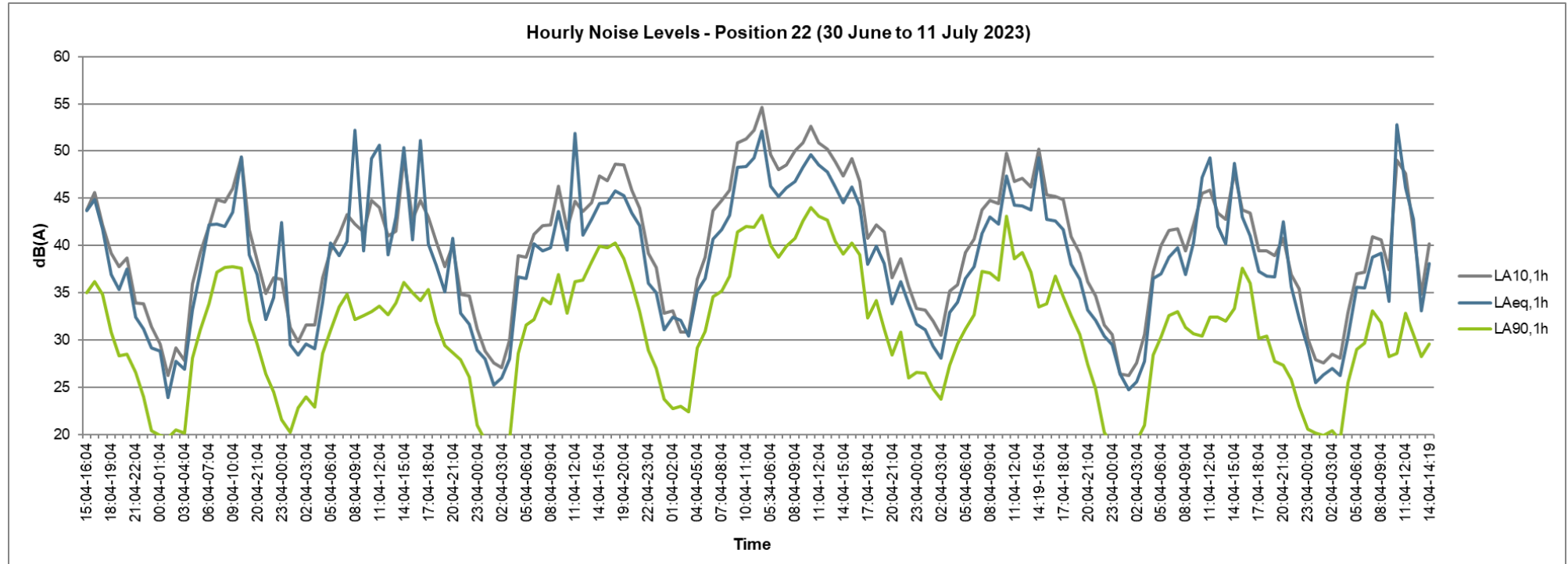


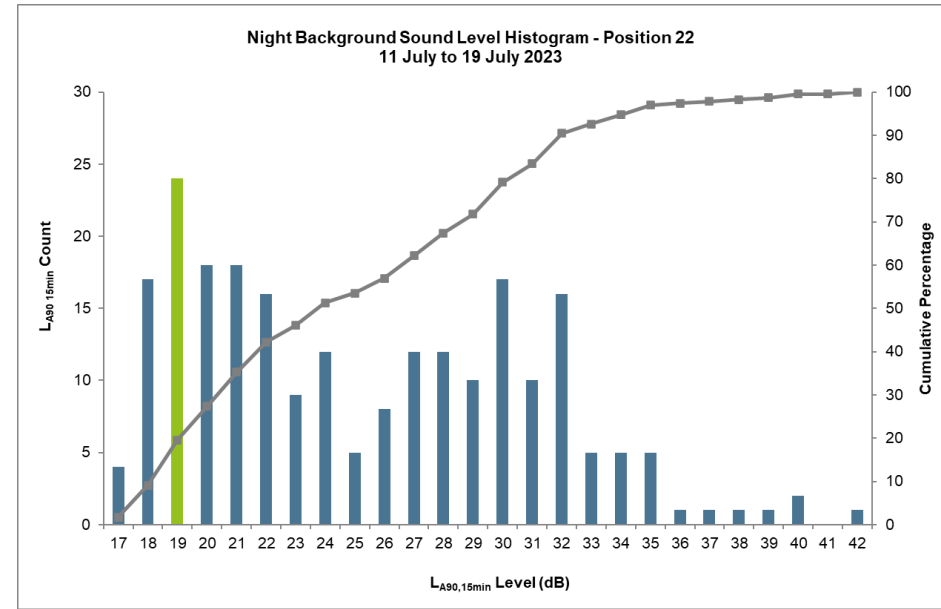
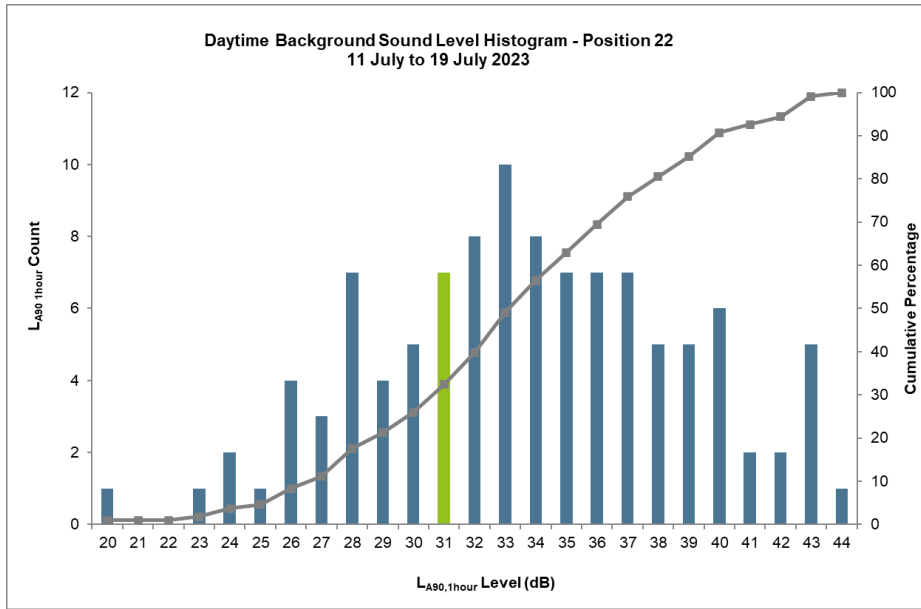
Position 21





Position 22





1.3. Survey Equipment

- 1.3.1. All measurements were undertaken with the microphone positioned at least 3.5m away from reflecting surfaces and at a height of 1.5m above the ground, considered to be under free-field measurement, to the requirements of BS 7445.
- 1.3.2. The calibration of each sound level meter was checked before and after the measurements, using the acoustic calibrator at 94dB at 1kHz; no significant calibration drift was noted (+/- 0.3dB).
- 1.3.3. The sound level meters used conform to the Class 1 requirements of BS EN 61672-1: 2013 'Electroacoustics. Sound level meter, Specifications'. The calibrator used conforms to the requirements of BS EN 60942: 2018 'Electroacoustics, Sound calibrators'. The equipment used has a calibration history that is traceable to a certified calibration institution.

Sound level meter	Measurement position	Calibration date
Rion NL-52, Serial number 00197782	1, 9	28/06/21
Rion NL-52, Serial number 00976176	2, 8, 11, 19	19/08/21
Rion NL-52, Serial number 00876025	6, 13, 15, 18	16/10/21
Rion NL-52, Serial number 01043373	3, 7, 12, 17, 20	11/04/23
Rion NL-52, Serial number 00976244	4, 5, 15, 21	15/12/21
Rion NL-52, Serial number 01265456	10, 16, 22	29/09/21

Acoustic calibrator	Measurement position	Calibration date
Rion NC-75, serial number 35270127	1, 2, 3, 4, 6, 14, 15, 18, 19, 21	07/09/2022
Rion NC-75, serial number 35270126	5, 7, 8, 9, 10, 11, 12, 13, 16, 17, 20, 22	31/05/2023



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