

RIVERBEND WIND ENERGY FACILITY



Exhibit A-1.7 SOUND REPORT AND MONITORING PROTOCOL

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EXHIBIT A-1.7 – SOUND REPORT AND MONITORING PROTOCOL

A-1.7.a – Submit a report detailing the sound modeling results along with proposed preconstruction (optional) and postconstruction sound monitoring plans to be completed upon receipt of a siting certificate from the Commission as well as mitigation plans to ensure that sound emitted from the facilities will remain below the statutory limit throughout the operational life of the facilities. An overview of the sound report requirements is provided below.

1. Sound modeling must be conducted following the requirements of International Organization for Standardization (ISO) 9613-2 (2024), “Engineering method for the prediction of sound pressure levels outdoors.”
2. The purpose of the Sound Report is to provide the Commission with information necessary to assess if the facility meets the noise limits defined in MCL 460.1226.
3. All sound studies shall be completed by or under the direction of a qualified noise control engineer whose qualifications are documented in the report.
4. The sound monitoring should generally follow the requirements of the American National Standards Institute (ANSI) S12.18 and ANSI S12.9 Part 3, where applicable.
5. Reporting shall include, but is not limited to, the following:

Facility Description

Maps and descriptions of sources and monitoring locations, including the distance from each to the nearest facility equipment.

Sound Modeling Results

Sound Modeling Results Discussion including an assessment of the noise impacts and ability to meet MCL 460.1226.

A pre-construction noise analysis report prepared by Hankard Environmental, a noise consultant based in Verona, Wisconsin, has been created in full compliance with all listed regulations and is available in **Appendix 1.7-A – Pre-construction Noise Analysis Report**. This report includes sound modeling results, conducted per ISO 9613-2 (2024) standards, to predict outdoor sound pressure levels, and confirms the facility meets the noise limits set by MCL 460.1226. Prepared under the direction of a qualified noise control engineer, the report follows ANSI standards S12.18 and S12.9 Part 3 for sound monitoring. The document includes a facility description, maps and descriptions of sound sources and monitoring locations, modeling results, and an assessment of compliance with noise limits. It also includes post-construction sound monitoring protocols as required. Additionally, a separate report was prepared for the single transformer Project variant, which is included in **Appendix 1.7-B**.

6. Submit a Pre-construction Sound Monitoring Protocol (optional) in accordance with the guidance.

An ambient noise survey was conducted for the Project during June and July of 2024. Noise levels were measured at six locations representative of the non-participating noise-sensitive residences located closest to the Project. The measurement points were selected to be representative of rural non-participating residences, both close to and removed from existing sources of noise,

which would be most impacted by the Project. The results of the ambient noise study can be found in **Appendix 1.7-A – Pre-construction Noise Analysis Report**.

7. Submit a Post-construction Sound Monitoring Protocol in accordance with the guidance.

A Post-construction Sound Monitoring Protocol is available in **Appendix 1.7-C – Post-construction Sound Monitoring Protocol**. This protocol describes the post-construction sound monitoring equipment, measurement and analysis procedures, and documentation to which the Project commits.

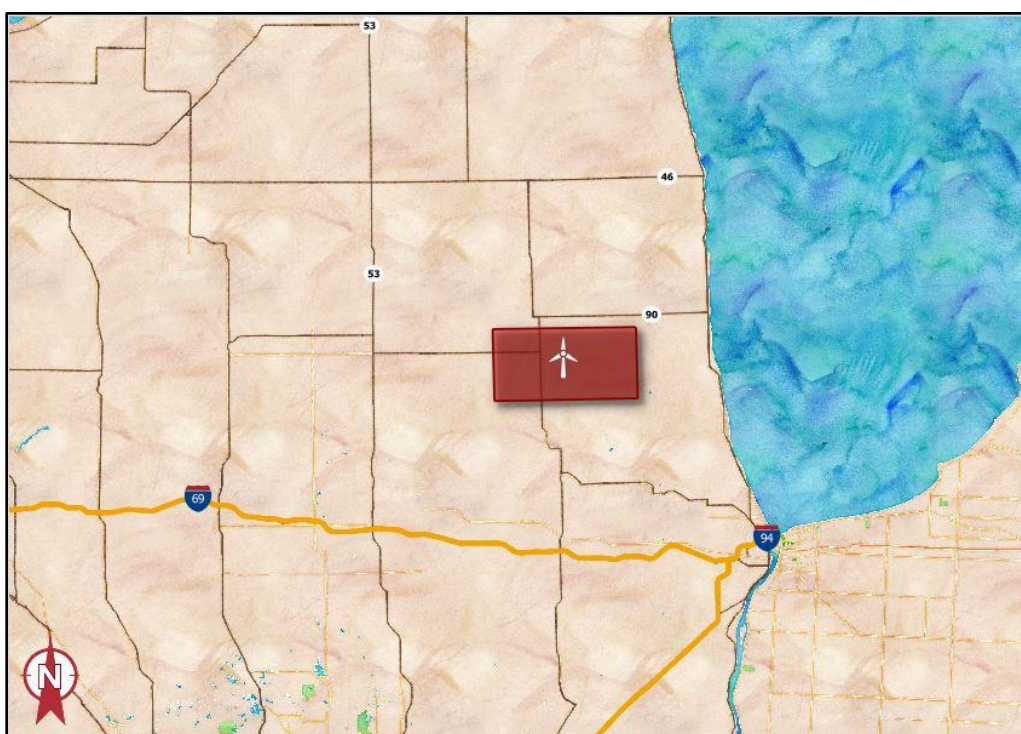
Appendix 1.7-A: PRE-CONSTRUCTION NOISE ANALYSIS REPORT

Pre-Construction Wind Turbine Noise Analysis

for the proposed

Riverbend Wind Energy Facility

April 21, 2026



Prepared for:

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Prepared by:

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1. Introduction

This report describes the pre-construction noise analysis conducted by Hankard Environmental for the proposed Riverbend Wind Energy Facility (Project, Facility). The analysis was conducted at the request of the Project proponent, MI Energy Developments, LLC, in support of their application for a Renewable Energy or Storage Siting Certificate under the provisions of Michigan Compiled Laws (MCL) 460.1226(7)(g) Section 226(8) of Act 233. An ambient noise study was also conducted to analyze existing noise levels within and near the Project (Project Area).

The Project is expected to produce up to 300 megawatts (MW) of electric power using 50 wind turbines, all of which are to be located in Sanilac County, Michigan. Also included in the analysis is noise from the Facility substation. Figure 1-1 shows the general location of the Project, which is approximately 60 miles northeast of Detroit, Michigan.

This report describes the applicable noise regulation and implementation methods, the Project and its environs, the methodology and results of the ambient noise study, the data used to predict noise levels, and the results of the noise level predictions demonstrating compliance with the state of Michigan law.

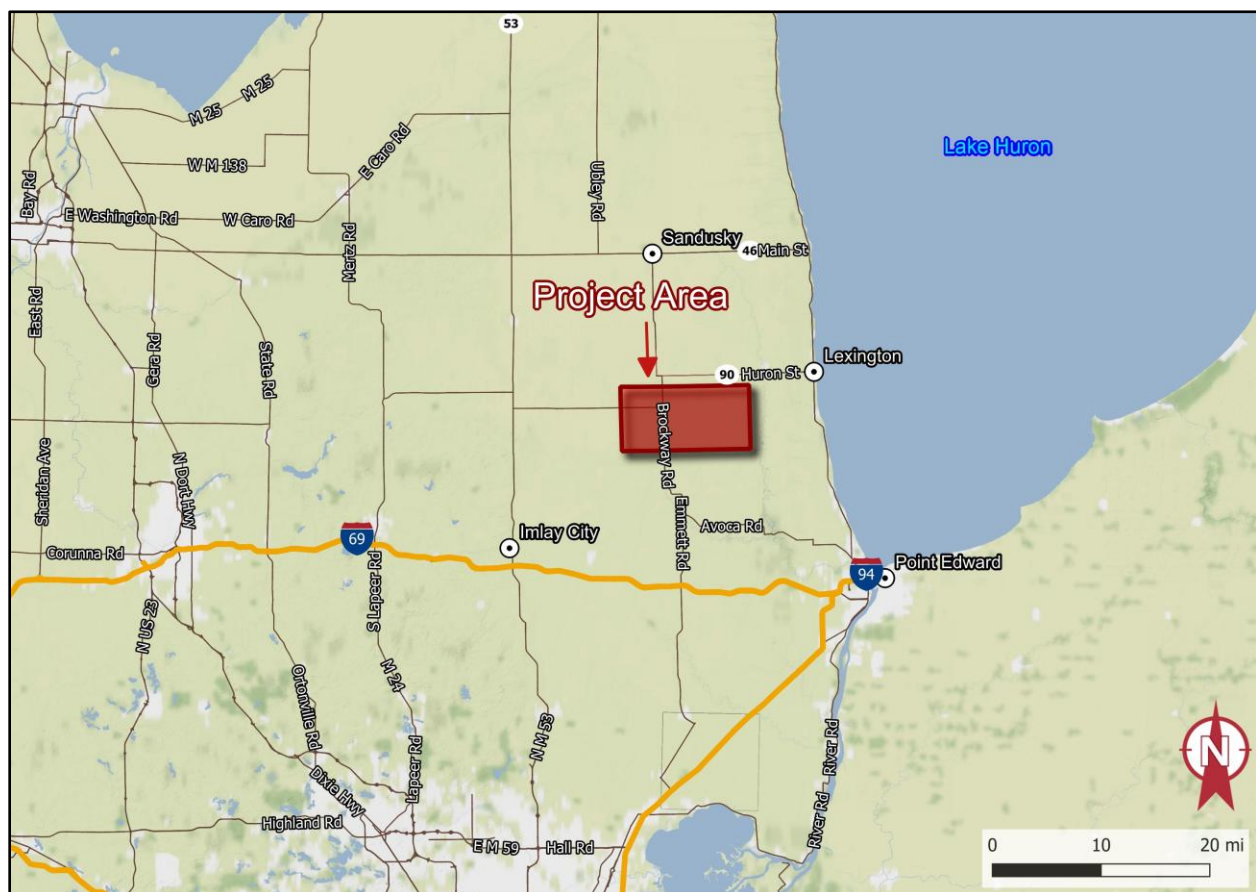


Figure 1-1. General Location of the Proposed Riverbend Wind Energy Facility

2. Applicable Noise Standards

There are no federal laws or regulations that apply to noise emissions from the Project. The Project is located in Fremont and Speaker Townships in Sanilac County, Michigan. Pursuant to Act 233, local jurisdictions with noise ordinances that are more restrictive than those defined by Michigan Compiled Laws (MCL) 460.1226 are not recognized. The Project is subject to the requirements of MCL 460.1226 Subsection (8)(b)(iv) which states:

The wind energy facility does not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.

On October 10, 2024 the Michigan Public Service Commission (MPSC) issued PA 233 Application Filing Instructions and Procedures, which includes Attachment D - Sound Report Requirements. The Sound Report Requirements include detailed noise level modeling (prediction), measurement, and reporting guidelines. A detailed description of the noise modeling methodology used in this analysis, as it pertains to the requirements listed in the Sound Report Requirements, can be found in Section 4 below.

On October 10, 2024 the MPSC also issued Final Rules U-21547 (Order). The Order describes the following in relation to application requirements and sound modeling guidelines:

1. Minimum Qualifications for Noise Control Engineer: See Section 7, below, for a description of Hankard Environmental's qualification for conducting this noise level assessment.
2. Tonal Prominence Penalty: See Section 5, below, for a full description of Hankard Environmental's tonality assessment. For this noise level analysis, a +5 dB penalty was included in transformer sound power levels but not wind turbine sound power levels, as the turbines' noise emissions are not tonal according to ANSI S12.9 Part 4 (Annex C).
3. Façade Pressure Doubling Method: To account for façade pressure doubling, +6 dB was added to the predicted noise levels presented herein.
4. Pre-construction Sound Monitoring: A pre-construction sound survey was conducted and the results are described in Section 4.
5. Post-construction Monitoring: The required post-construction monitoring is not addressed in this preconstruction noise modeling assessment.

3. Project Description

The Project plans to install 50 wind turbines across Speaker and Fremont Townships in Sanilac County, Michigan, generating up to 300 MW of electric power. This analysis considered five different turbine models, the Vestas V162-6.0 MW turbine with a hub height of 119 meters, the Nordex 169/5.X turbine with a hub height of 112 meters, the Vestas V162-6.8 MW turbine with a hub height of 119 meters, the Vestas V162-7.2 MW turbine with a hub height of 119 meters, and the Vestas V163-4.5 MW turbine with a hub height of 118 meters. All turbines would be equipped with Serrated Trailing Edge (STE) blades. Associated facilities include gravel access roads, underground cabling, and a substation.

The substation includes two 150 megavolt ampere (MVA) step-up transformers. Figure 3-1 shows the locations of the proposed wind turbines and substation. A table of all Project noise source locations and their coordinates is provided in Appendix A.



4. Ambient Noise Survey

An ambient noise survey was conducted in the Project Area during June and July of 2024. Noise levels were measured at six locations representative of the non-participating noise-sensitive receptors located closest to the Project. Noise measurement locations are shown in Figure 4-1. The measurement points were selected to be representative of rural non-participating residences, both close to and removed from existing sources of noise, which would be most impacted by the Project. A full description of locations, measurement and analysis methodologies, and results are provided in Appendix D.

Sources of existing noise most commonly observed included natural sounds (birds, wind), distant traffic (Galbraith Line Road and Highway 90), and local traffic. Less frequently observed noise sources included agricultural equipment, aircraft overhead, and distant dog barks. The monitors continuously recorded noise levels for 20 full days between June 25 and July 16, 2024. Existing L_{eq} noise levels (mean), during conditions conducive to full turbine operations during daytime and nighttime hours, ranged from 39 to 51 dBA and were primarily correlated with local traffic and wind gusts. Existing L_{90} noise levels during conditions conducive for full turbine operations during daytime and nighttime hours, were typically 30-40 dBA and were strongly correlated with local traffic and average wind conditions. Table 4-1 summarizes the ambient noise levels during conditions conducive to full turbine operations.

Table 4-1. Ambient Hourly Noise Levels During Conditions of Full Turbine Acoustic Emissions

Location	Mean Hourly L_{eq} (dBA)	Mean Hourly L_{10} (dBA)	Mean Hourly L_{50} (dBA)	Mean Hourly L_{90} (dBA)
F1	51	53	42	36
F2	44	46	41	37
F3	41	43	37	32
Fremont Average	45	47	40	35
S1	40	42	37	33
S2	42	44	40	36
S3	39	41	36	32
Speaker Average	40	42	37	34
Site-Wide Average	43	45	39	34

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

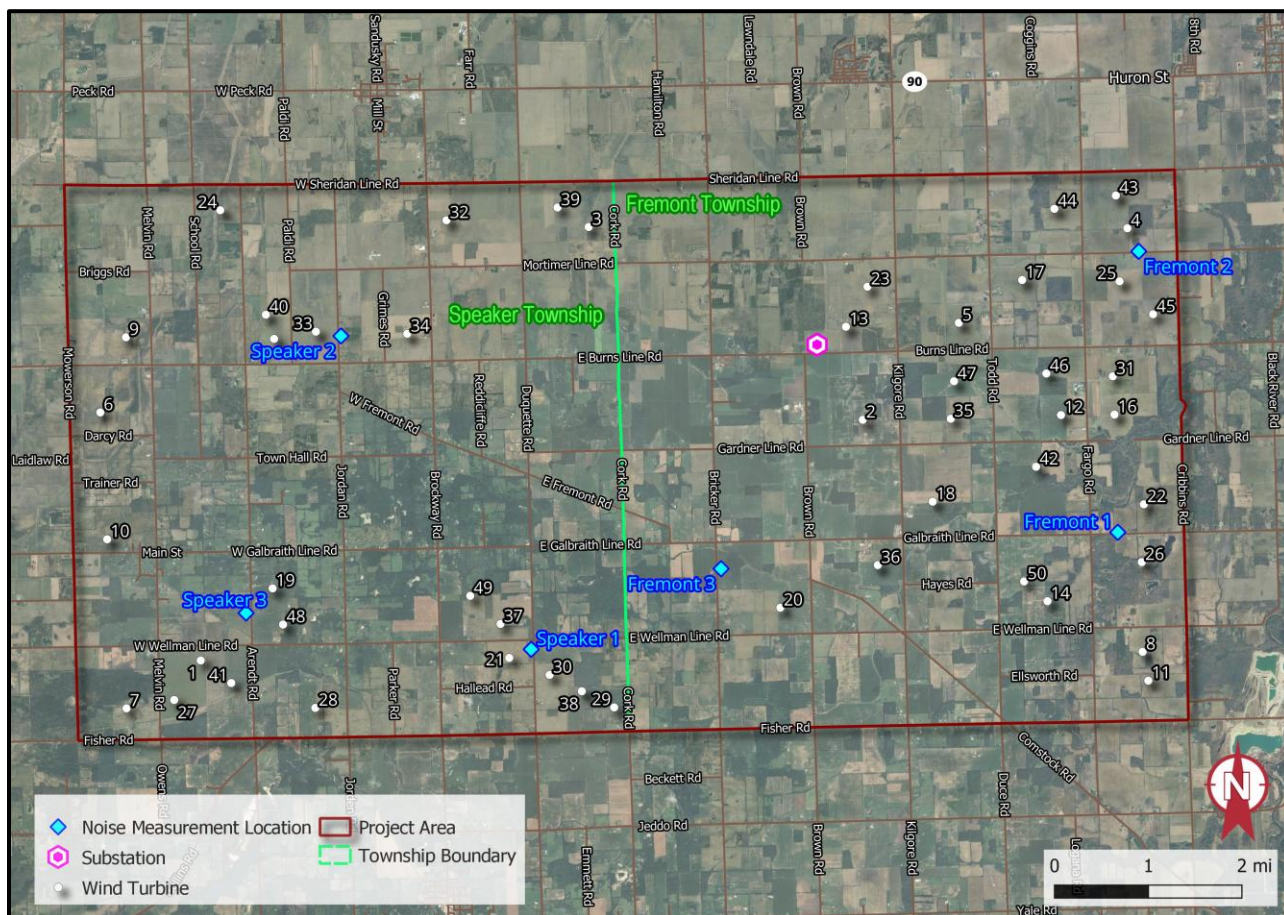


Figure 4-1. Ambient Noise Survey Measurement Locations

5. Noise Modeling Method

Noise levels from the proposed Project were predicted following the guidelines prescribed by the MPSC in PA 233 Application Filing Instructions and Procedures, Sound Report Requirements. Table 5-1, below, lists the noise level modeling requirements for wind, solar, and energy storage facilities set forth in the Sound Report Requirements, and the subsections following Table 5-1 describe how each parameter was applied for this analysis. Noise levels were predicted using the method set forth in International Organization for Standardization (ISO) Standard 9613-2:2024 - *Attenuation of Sound During Propagation Outdoors*. Modeling was implemented using the SoundPLAN v9.1 acoustical modeling program. Figure 5-1 shows a representative three-dimensional view of the SoundPLAN model of the Project.

Table 5-1. Sound Modeling Parameters

Parameter	Value
G (ground factor)	0.0 over water and large areas of hard ground, 0.5 everywhere else
Modeling uncertainty adjustment	Minimum of +2 dB for wind projects, Minimum of +0 dB for all other sources
Receptor/grid height	4.0 m for wind projects, otherwise, • 4.0 m for two- or more-story dwellings (default) • If sound barriers are proposed, the height of the highest window for each dwelling • 1.5 m for property boundaries and one-story dwellings
Source height	For wind turbines, hub height. For all other sources, top of the sound source
Receptors	All dwellings within 1 mile of any facility sound source
Temperature/Humidity	10°C, 70%
Sound power level	See below
Source directivity	For wind turbines, omnidirectional. For all other sources, directionality of sound power may be considered if known.
C _{met} (meteorological adjustment)	0 (none)
Include all sources within	8,000 m
Dense vegetation	No foliage attenuation allowed to be considered outside of Project-controlled parcels
Tonal prominence	+5 dB tonal penalty to source sound power. The tonal penalty can be removed if it can be shown that the facility would not have a tonal prominence at a dwelling when the measured background sound of the lowest hourly L ₉₀ is added.
Façade pressure doubling ¹	+6 dB to modeled free field outer wall sound pressure level
Other energy facilities	Other energy facilities that have an application submitted prior to this facility, approved, or built, within two miles of the facility must be included in a separate cumulative impact model run.

¹ MCL 460.1226 states that the noise limit is considered "at the nearest outer wall of the nearest dwelling." In practice, this would be measured with a microphone mounted directly on the façade, that is, flush mounted on the vertical reflecting surface of a building. The pressure doubling at the surface with respect to the free-field condition leads to a 6 dB increase in sound level and is referred to as the "6-dB position" in ANSI S12.9 Part 3. Sound modeling conducted using ISO 9613-2 does not include the +6 dB adjustment. Therefore, 6 dB must be added to the sound modeling results to reflect what would be measured at the façade.

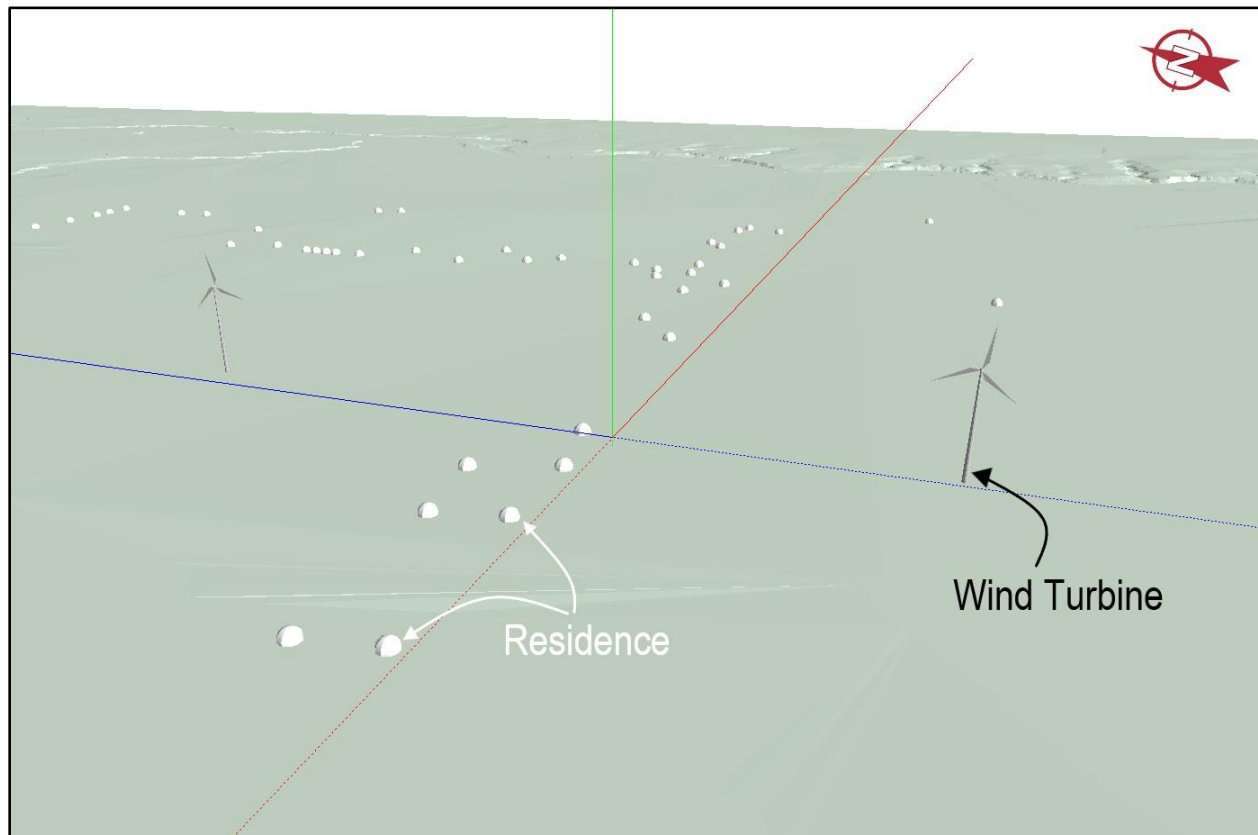


Figure 5-1. Three-Dimensional View of the SoundPLAN Noise Model

Ground Factor

The ground absorption factor was set to 0.5.

Modeling Uncertainty Adjustment

An uncertainty factor of +2 dBA was added to all predicted noise levels.

Receptors / Grid Height

In the SoundPLAN model receptor points were placed at each of the 1,469 residences (including 209 participants and 1,260 non-participants) located within approximately 1.25 miles of any Project noise source. The geographic locations of the receptors were obtained from the Project and are listed in Appendix B. The height of each receptor was set to 4 meters above the ground. Noise level contours were also generated to help graphically illustrate how predicted noise levels vary within the Project area. The height above ground for the noise level contours was also set to 4 meters.

Source Height, Sound Power Level, Source Directivity

In the SoundPLAN model, each turbine was represented as an acoustical point source located at its hub-height propagating equally in all directions. The geographic coordinates, ground elevation, and source height for each turbine and substation transformer, as well as the

transformer size, are listed in Appendix A. The analysis considered five different turbine models, the Vestas V162-6.0 MW turbine with a hub height of 119 meters, the Nordex 169/5.X turbine with a hub height of 112 meters, the Vestas V162-6.8 MW turbine with a hub height of 119 meters, the Vestas V162-7.2 MW turbine with a hub height of 119 meters, and the Vestas V163-4.5 MW turbine with a hub height of 118 meters. All turbines would be equipped with Serrated Trailing Edge (STE) blades. All turbines were assumed to be operating in full, continuous, and normal mode (versus noise-reduction mode).

Table 5-2 lists the overall A-weighted sound power levels used in the model for each source. The noise emission levels of each turbine were provided by the manufacturer and were determined according to International Electrotechnical Commission Standard 61400-11. In accordance with the Sound Report Requirements, this analysis used the sound power levels reported by the manufacturer for a wind speed of 10 m/s at hub height, which is the wind speed at which maximum acoustic emissions occur.

The Project includes a substation that will contain two 150 MVA step-up transformers, which are the only significant noise-producing equipment. The noise analysis assumed the simultaneous operation of both transformers, including the operation of the cooling fans. The sound power level of the step-up transformers is listed in Table 5-2. The transformers were modeled as point sources located two meters above the ground, with no barriers or directivity reductions. The sound power level of the transformers was estimated based on the procedures outlined in the Institute of Electrical and Electronics Engineers (IEEE) Standard C57.12.90-2021. The transformers were assumed to be tonal, and thus 5 dBA was added to the sound power levels to account for this tonality, per the Sound Report Requirements.

Table 5-2. Source Sound Power Levels

Source	Source or Hub Height (meters)	Sound Power Level (dBA)
Vestas V162-6MW STE Blades	119	104.3
Nordex 169/5.X Mode 0 STE Blades	112	106.5
Vestas V162-6.8MW STE Blades	119	103.3
Vestas V162-7.2MW STE Blades	119	104.6
Vestas V163-4.5MW STE Blades	118	106.3
Transformer 150 MVA*	2	103.8

* 5 dBA tonality penalty included

Temperature/Humidity

The air temperature, relative humidity, and atmospheric pressure were set to conditions of 10°C, 70%, and 1 atmosphere, respectively. These values represent the lowest amount of atmospheric absorption of sound available in the ISO 9613-2:2024 method and result in the highest levels of sound reaching the receptors.

C_{met} (Meteorological Adjustment)

No meteorological adjustment was made for this analysis.

Source Range

All sources located within 8,000 meters of a receptor were included in the predictions.

Dense Vegetation

No attenuation due to foliage was considered for this sound level assessment.

Tonal Prominence

The assessment of tonality was conducted by applying the criterion in ANSI S12.9 Part 4 (Annex C) which looks at each one-third octave band noise level and compares it to the average of the levels in the two adjacent bands. If the differences exceed certain thresholds, the noise is considered tonal. The allowable differences are 15 dB from 25 to 125 Hz, 8 dB from 160 to 400 Hz, and 5 dB from 500 to 10,000 Hz. The one-third octave band noise levels provided by the manufacturer of each turbine were analyzed using this standard.

The wind turbines considered for this Project do not have tonal noise emissions according to ANSI S12.9 Part 4, Annex C. However, noise emissions from the Project's substation step-up transformers have the potential to be tonal and for this study are assumed tonal. As a result, 5 dBA was added to the transformer sound power levels, as shown in Table 5-2 above.

Façade Pressure Doubling

In accordance with the Sound Report Requirements, 6 dBA was added to all predicted noise levels to account for façade pressure doubling.

Other Energy Facilities

There are no other energy facilities located within two miles of the Project.

6. Predicted Noise Levels

Noise levels were predicted for the full and continuous operation of the proposed Project for each of five potential wind turbine models. Noise levels were predicted at each of the 1,469 receptors identified within approximately 1.25 miles of any proposed noise source.

- Predicted noise levels for all receptors are at or below the 55 dBA limit set forth in MCL 460.1226.
 - For the Vestas V162-6.0MW turbines with STE blades, predicted noise levels at non-participating receptors range from 35 to 52 dBA (L_{eq}).
 - For the Nordex 169/5.X turbines with STE blades, predicted noise levels at non-participating receptors range from 37 to 54 dBA (L_{eq}).
 - For the Vestas V162-6.8MW turbines with STE blades, predicted noise levels at non-participating receptors range from 35 to 51 dBA (L_{eq}).
 - For the Vestas V162-7.2MW turbines with STE blades, predicted noise levels at non-participating receptors range from 36 to 52 dBA (L_{eq}).
 - For the Vestas V163-4.5MW turbines with STE blades, predicted noise levels at non-participating receptors range from 38 to 54 dBA (L_{eq}).
 - Table 6-1 lists the predicted noise level at the loudest 15 non-participating receptors. The predicted noise levels at all receptor locations, for each turbine type, are listed in Appendix B.
- Figure 6-1 shows the results of the noise level predictions in the form of noise level contours. The areas between turbines and the 55 dBA L_{eq} noise level contours have predicted levels above 55 dBA. Those areas outside of the contours have a predicted noise level less than 55 dBA. More detailed noise level contour figures showing receptors are provided in Appendix C.
- Near the Project substation, predicted noise levels at non-participating receptors are less than 55 dBA, provided the step-up transformers procured by the Project have a sound power level less than or equal to the value shown in Table 5-2.
- Note that this analysis represents the very highest wind turbine noise levels expected. The noise level prediction method prescribed by the MPSC is consistent with that described by ANSI/ACP Standard 111-1 (2022): *Wind Turbine Sound Modeling*. This noise level prediction method has been validated by Hankard Environmental and other researchers and shown to overpredict measured levels by 1 to 2 dBA.
- Finally, a majority of the time wind turbine noise levels will be less than those described herein when the turbines are not producing full acoustic output due to low winds, and/or atmospheric conditions not being as conducive to sound propagation as assumed herein (e.g., unstable atmosphere, receptors crosswind to the nearest turbines).

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

Table 6-1. Highest Predicted Noise Levels at Non-Participating Receptors

Receiver	Predicted Noise Level (dBA)				
	Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162- 6.8MW STE	Vestas V162- 7.2MW STE	Vestas V163- 4.5MW STE
R-2426	52	54	51	52	54
R-2797	51	53	51	52	53
R-3597	51	53	51	52	53
R-1474	51	53	50	51	53
R-3420	50	52	50	51	53
R-1266	50	52	50	51	52
R-2798	50	52	50	51	52
R-2698	50	52	49	51	52
R-2427	50	52	49	50	52
R-2519	50	52	49	50	52
R-0219	50	52	49	50	52
R-2096	50	52	49	50	52
R-4346	50	52	49	50	52
R-1430	50	52	49	50	52
R-0788	50	52	49	50	52

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

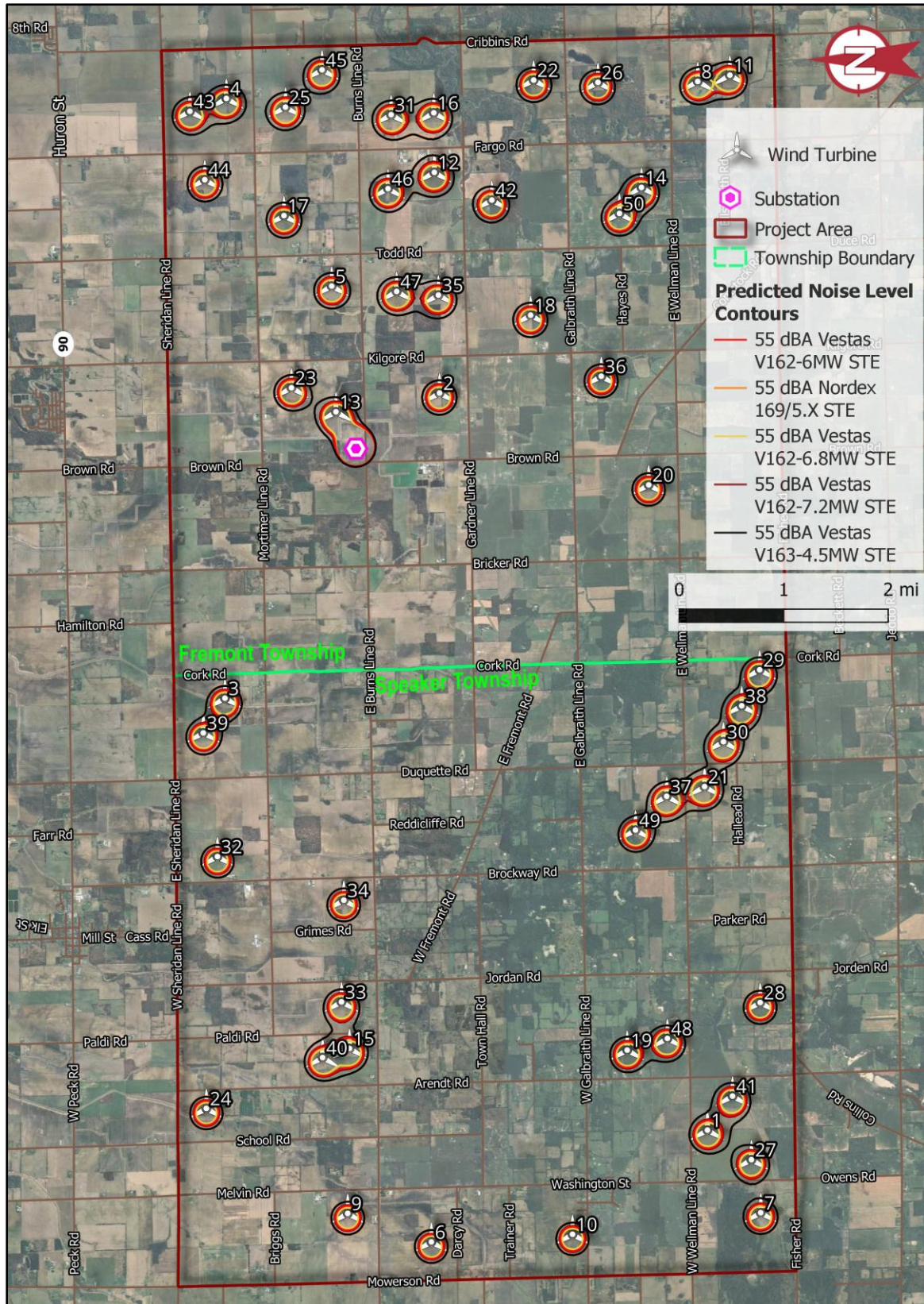


Figure 6-1. Predicted Noise Level Contours

7. Qualifications

All aspects of this study were either conducted by or directly overseen by Mr. Michael Hankard, who is the founder and owner of Hankard Environmental, Inc. Mr. Hankard has 35 years of acoustical consulting experience. He has conducted hundreds of noise measurement surveys for projects in the electrical power generation, mining, transportation, and other industries. He holds a B.S.E.E. degree from the University of Maine with a specialization in acoustics and is a full member of the Institute of Noise Control Engineering (INCE) and the Acoustical Society of America (ASA). His entire career has been dedicated to the measurement, analysis, mitigation, and compliance assessment of environmental noise.

Mr. Hankard was a member of the committee that developed the American National Standards Institute (ANSI) and American Clean Power (ACP) standard ACP 111-1 (2022), *Wind Turbine Sound Modeling*, and he is currently participating in the process to develop a national standard for the prediction of noise from energy storage projects.

APPENDIX A

Project Noise Source Locations

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

Table A-1. Noise Source Locations

Source Name	UTM 17N		Ground Elevation (m asl)	Source / Hub Height – Vestas V162-6MW (m agl)	Source / Hub Height – Nordex (m agl)	Source / Hub Height – Vestas V162-6.8MW (m agl)	Source / Hub Height – Vestas V162-7.2MW (m agl)	Source / Hub Height – Vestas V163-4.5MW (m agl)
	Easting (m)	Northin g (m)						
1	349477	4781358	245	119	112	119	119	118
2	360829	4785484	230	119	112	119	119	118
3	356129	4788790	235	119	112	119	119	118
4	365366	4788768	226	119	112	119	119	118
5	362476	4787146	230	119	112	119	119	118
6	347755	4785610	242	119	112	119	119	118
7	348205	4780537	245	119	112	119	119	118
8	365628	4781507	225	119	112	119	119	118
9	348194	4786899	240	119	112	119	119	118
10	347873	4783436	246	119	112	119	119	118
11	365725	4781012	225	119	112	119	119	118
12	364228	4785565	225	119	112	119	119	118
13	360540	4787080	230	119	112	119	119	118
14	363996	4782374	226	119	112	119	119	118
15	350735	4786871	245	119	112	119	119	118
16	365145	4785573	225	119	112	119	119	118
17	363562	4787881	230	119	112	119	119	118
18	362028	4784081	227	119	112	119	119	118
19	350709	4782594	250	119	112	119	119	118
20	359415	4782262	230	119	112	119	119	118
21	354768	4781402	245	119	112	119	119	118
22	365649	4784035	225	119	112	119	119	118
23	360910	4787766	230	119	112	119	119	118
24	349811	4789076	236	119	112	119	119	118
25	365232	4787858	226	119	112	119	119	118
26	365614	4783044	229	119	112	119	119	118
27	349022	4780680	245	119	112	119	119	118
28	351442	4780545	255	119	112	119	119	118
29	356566	4780553	237	119	112	119	119	118
30	355459	4781111	245	119	112	119	119	118
31	365116	4786230	225	119	112	119	119	118
32	353690	4788905	240	119	112	119	119	118

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

Source Name	UTM 17N		Ground Elevation (m asl)	Source / Hub Height – Vestas V162-6MW (m agl)	Source / Hub Height - Nordex (m agl)	Source / Hub Height – Vestas V162-6.8MW (m agl)	Source / Hub Height – Vestas V162-7.2MW (m agl)	Source / Hub Height – Vestas V163-4.5MW (m agl)
	Easting (m)	Northing (m)						
33	351452	4786995	244	119	112	119	119	118
34	353018	4786959	245	119	112	119	119	118
35	362338	4785502	229	119	112	119	119	118
36	361087	4782993	229	119	112	119	119	118
37	354618	4781985	246	119	112	119	119	118
38	356012	4780830	240	119	112	119	119	118
39	355595	4789124	235	119	112	119	119	118
40	350594	4787286	241	119	112	119	119	118
41	350001	4780971	245	119	112	119	119	118
42	363801	4784679	225	119	112	119	119	118
43	365168	4789330	227	119	112	119	119	118
44	364114	4789101	230	119	112	119	119	118
45	365807	4787294	225	119	112	119	119	118
46	363977	4786278	228	119	112	119	119	118
47	362394	4786145	229	119	112	119	119	118
48	350889	4781974	250	119	112	119	119	118
49	354098	4782466	250	119	112	119	119	118
50	363595	4782713	227	119	112	119	119	118
Transformer 1	360046	4786772	232	2	2	2	2	2
Transformer 2	360087	4786772	232	2	2	2	2	2

APPENDIX B

Receptor Locations and Predicted Noise Levels

Table B-1. Receptor Locations and Predicted Noise Levels

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0016	Non-Participating	350137	4786266	257	253	45	47	44	46	47
R-0017	Non-Participating	348691	4785731	245	241	43	45	43	44	46
R-0018	Non-Participating	348517	4784520	248	244	42	44	41	43	44
R-0019	Non-Participating	351788	4786212	249	245	45	47	44	46	47
R-0020	Non-Participating	353424	4785206	248	244	39	40	38	40	41
R-0021	Non-Participating	353512	4785201	247	243	39	40	38	40	41
R-0027	Non-Participating	365196	4791166	231	227	38	40	38	39	40
R-0032	Participating	357658	4788122	241	237	39	41	39	40	41
R-0035	Non-Participating	347471	4783245	250	246	48	50	48	49	50
R-0036	Non-Participating	351106	4783133	258	254	46	48	45	47	48
R-0039	Non-Participating	354998	4783345	248	244	42	44	42	43	44
R-0041	Non-Participating	362825	4783523	229	225	46	47	45	46	48
R-0042	Non-Participating	363212	4781949	233	229	46	47	45	46	48
R-0054	Non-Participating	353367	4789640	255	251	43	45	43	44	45
R-0055	Non-Participating	353519	4786113	245	241	42	44	41	43	44
R-0056	Non-Participating	353514	4785282	246	242	39	41	38	40	41
R-0057	Non-Participating	353509	4785815	245	241	40	42	40	41	43
R-0066	Non-Participating	366359	4784407	231	227	45	47	44	46	47
R-0070	Participating	349201	4781567	249	245	52	54	51	52	54
R-0071	Non-Participating	351893	4783334	259	255	41	43	41	42	44
R-0074	Non-Participating	350503	4778814	244	240	38	40	38	39	41
R-0075	Non-Participating	350504	4778859	244	240	38	40	38	39	41
R-0079	Non-Participating	366100	4783585	229	225	48	50	47	48	50
R-0088	Non-Participating	349417	4785936	250	246	42	44	41	43	44
R-0089	Non-Participating	352214	4786488	249	245	45	47	45	46	47
R-0090	Participating	353374	4786943	249	245	50	52	49	51	52
R-0102	Non-Participating	357278	4790429	239	235	37	38	36	38	39
R-0103	Participating	355014	4788288	240	236	43	45	43	44	46
R-0104	Participating	359903	4785519	234	230	45	47	45	46	47
R-0105	Non-Participating	350113	4783287	259	255	44	46	43	44	46
R-0106	Non-Participating	348806	4782497	252	248	43	45	43	44	45
R-0107	Non-Participating	350960	4784261	254	250	40	42	40	41	42
R-0108	Participating	353519	4781946	254	250	46	48	45	46	48
R-0109	Non-Participating	348960	4779142	253	249	40	42	40	41	43
R-0111	Non-Participating	352855	4780101	247	243	40	42	40	41	43
R-0112	Non-Participating	352835	4780481	248	244	41	43	41	42	43
R-0113	Non-Participating	355226	4779412	249	245	41	42	40	41	43
R-0124	Non-Participating	348484	4789316	243	239	39	41	38	40	41
R-0129	Non-Participating	353264	4789581	259	255	43	45	43	44	46
R-0130	Non-Participating	350205	4786315	254	250	46	48	45	46	48
R-0144	Non-Participating	359511	4788146	239	235	43	44	42	43	44
R-0146	Non-Participating	362512	4789644	235	231	40	42	40	41	43
R-0147	Non-Participating	364593	4790699	234	230	40	42	40	41	43
R-0148	Non-Participating	361516	4784479	234	230	47	49	47	48	49
R-0149	Participating	365714	4786715	229	225	49	51	48	49	51
R-0150	Non-Participating	348665	4784216	249	245	42	44	41	43	44
R-0152	Non-Participating	352874	4783218	259	255	41	43	40	42	43
R-0153	Non-Participating	348949	4779170	252	248	41	42	40	41	43
R-0155	Non-Participating	352245	4779944	254	250	42	44	42	43	44
R-0157	Participating	360400	4783403	234	230	45	47	44	45	47
R-0158	Non-Participating	362504	4782633	234	230	44	46	44	45	46
R-0165	Non-Participating	352495	4790389	249	245	36	38	36	37	39
R-0168	Non-Participating	349317	4784530	249	245	40	42	40	41	43
R-0177	Non-Participating	356710	4788192	239	235	43	45	43	44	46
R-0181	Participating	365502	4788308	229	225	51	53	50	51	53
R-0182	Non-Participating	363472	4786773	234	230	48	50	48	49	50
R-0184	Non-Participating	366838	4784561	234	230	42	44	41	43	44
R-0186	Non-Participating	346042	4783981	248	244	37	38	36	38	39
R-0190	Non-Participating	356118	4778615	243	239	37	39	37	38	40

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0206	Non-Participating	352585	4790302	249	245	37	39	37	38	39
R-0208	Non-Participating	348686	4786209	249	245	45	46	44	45	47
R-0209	Non-Participating	347279	4786179	244	240	45	47	44	45	47
R-0210	Non-Participating	351809	4785439	255	251	41	43	40	42	43
R-0218	Non-Participating	359299	4788175	240	236	42	43	42	42	43
R-0219	Non-Participating	361344	4787687	234	230	50	52	49	50	52
R-0222	Non-Participating	350062	4783176	259	255	44	46	44	45	46
R-0223	Non-Participating	350279	4783288	259	255	44	46	44	45	47
R-0224	Non-Participating	352169	4783135	259	255	41	43	41	42	43
R-0225	Non-Participating	358339	4781145	239	235	40	42	39	41	42
R-0236	Non-Participating	350812	4790347	243	239	37	39	37	38	40
R-0237	Participating	349326	4787966	244	240	43	45	42	43	45
R-0241	Non-Participating	353445	4790305	249	245	38	40	38	39	41
R-0242	Non-Participating	353696	4789561	251	247	45	47	44	46	47
R-0243	Non-Participating	350253	4784495	254	250	40	41	39	41	42
R-0261	Non-Participating	354858	4790826	239	235	37	39	37	38	39
R-0262	Non-Participating	357209	4789617	244	240	40	41	39	40	42
R-0263	Non-Participating	357380	4790203	239	235	37	39	37	38	39
R-0267	Non-Participating	363044	4785163	230	226	48	50	47	49	50
R-0269	Non-Participating	351496	4783352	259	255	42	44	42	43	45
R-0271	Non-Participating	349037	4779011	254	250	40	41	39	41	42
R-0272	Non-Participating	352072	4779693	255	251	41	43	41	42	44
R-0273	Non-Participating	362582	4783338	230	226	45	47	45	46	48
R-0274	Non-Participating	362226	4782622	234	230	44	45	43	44	46
R-0276	Non-Participating	365793	4782578	233	229	49	51	48	49	51
R-0277	Non-Participating	367509	4782028	226	222	39	40	38	40	41
R-0279	Non-Participating	365409	4780277	229	225	44	46	44	45	46
R-0291	Non-Participating	350306	4789557	242	238	44	46	44	45	47
R-0295	Non-Participating	353015	4789415	259	255	43	45	42	44	45
R-0307	Non-Participating	366654	4785039	229	225	42	44	42	43	45
R-0308	Participating	350304	4782109	250	246	49	51	48	50	51
R-0309	Non-Participating	353604	4782729	256	252	47	49	46	48	49
R-0310	Non-Participating	352639	4781599	249	245	42	44	42	43	44
R-0312	Participating	351572	4780098	255	251	48	50	47	49	50
R-0313	Non-Participating	352733	4779945	245	241	40	42	40	41	43
R-0316	Non-Participating	358091	4783350	237	233	39	41	39	40	41
R-0317	Participating	356645	4780178	239	235	50	52	49	51	52
R-0329	Non-Participating	353959	4790808	239	235	36	38	36	37	39
R-0330	Non-Participating	353397	4789449	254	250	46	47	45	46	48
R-0331	Non-Participating	353266	4789501	259	255	44	46	43	45	46
R-0333	Non-Participating	350086	4786354	259	255	45	47	45	46	47
R-0346	Participating	363915	4788356	234	230	49	51	48	49	51
R-0348	Non-Participating	364586	4787178	231	227	48	49	47	48	50
R-0349	Non-Participating	362993	4785277	230	226	48	50	48	49	51
R-0352	Non-Participating	348743	4783136	259	255	43	45	43	44	46
R-0353	Non-Participating	348422	4779914	249	245	46	48	46	47	49
R-0354	Non-Participating	354874	4783227	249	245	43	45	43	44	45
R-0355	Participating	360858	4783485	234	230	48	49	47	48	50
R-0356	Non-Participating	358204	4781735	239	235	40	42	40	41	43
R-0357	Non-Participating	366946	4783599	230	226	42	43	41	42	44
R-0383	Non-Participating	361215	4789628	238	234	39	41	39	40	41
R-0388	Participating	349118	4783284	259	255	42	44	42	43	44
R-0389	Non-Participating	353817	4783193	254	250	44	46	44	45	47
R-0391	Participating	355263	4780620	249	245	49	51	49	50	51
R-0392	Non-Participating	364559	4783477	229	225	46	48	45	47	48
R-0393	Non-Participating	366489	4780701	227	223	44	46	43	45	46
R-0417	Non-Participating	346063	4783129	249	245	36	38	36	38	39
R-0419	Non-Participating	348486	4783250	253	249	46	48	45	46	48
R-0420	Non-Participating	353588	4783723	253	249	41	42	40	41	43
R-0422	Non-Participating	354468	4783236	250	246	44	46	44	45	47

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0424	Non-Participating	356919	4781121	242	238	47	49	46	47	49
R-0425	Non-Participating	355744	4780043	245	241	46	48	45	47	48
R-0428	Non-Participating	366578	4781887	229	225	44	46	43	44	46
R-0436	Non-Participating	350937	4788063	244	240	45	47	45	46	48
R-0437	Participating	348118	4786454	244	240	49	51	48	49	51
R-0438	Non-Participating	354315	4786156	244	240	39	41	39	40	41
R-0452	Non-Participating	363144	4787475	234	230	49	51	48	50	51
R-0453	Non-Participating	351801	4782725	261	257	43	45	43	44	46
R-0454	Non-Participating	353514	4783083	259	255	44	46	43	45	46
R-0455	Participating	352712	4780919	249	245	42	44	41	43	44
R-0458	Participating	361588	4782451	230	226	45	47	44	46	47
R-0469	Non-Participating	347299	4784740	244	240	42	44	42	43	45
R-0470	Non-Participating	347308	4784769	244	240	43	45	42	43	45
R-0471	Non-Participating	351859	4787636	246	242	46	48	45	46	48
R-0472	Non-Participating	352029	4785815	251	247	42	44	42	43	44
R-0473	Participating	354203	4785741	244	240	38	40	38	40	41
R-0484	Non-Participating	357660	4789649	240	236	38	40	38	39	40
R-0486	Non-Participating	363003	4790148	234	230	40	42	40	41	42
R-0487	Non-Participating	366252	4788549	229	225	45	47	45	46	48
R-0489	Non-Participating	363067	4787160	234	230	49	51	48	49	51
R-0491	Non-Participating	367061	4785221	229	225	40	42	40	41	43
R-0494	Non-Participating	348471	4783231	253	249	46	48	45	46	48
R-0495	Non-Participating	352048	4781681	253	249	43	45	43	44	46
R-0496	Non-Participating	352082	4778729	244	240	37	39	37	38	39
R-0497	Participating	361290	4781978	234	230	42	44	42	43	45
R-0510	Non-Participating	349270	4790694	239	235	36	38	36	37	38
R-0514	Non-Participating	352587	4790348	249	245	37	39	36	38	39
R-0515	Non-Participating	354368	4788162	244	240	43	45	42	44	45
R-0516	Non-Participating	348598	4786333	249	245	46	48	45	46	48
R-0517	Non-Participating	353459	4785278	247	243	39	41	39	40	41
R-0536	Non-Participating	362370	4789718	236	232	40	42	40	41	42
R-0537	Non-Participating	367278	4788120	229	225	40	42	40	41	43
R-0538	Non-Participating	362844	4785155	231	227	49	50	48	49	51
R-0539	Non-Participating	367097	4785140	229	225	40	42	40	41	43
R-0541	Non-Participating	348545	4782847	256	252	44	45	43	44	46
R-0542	Participating	350145	4783657	254	250	42	44	41	43	44
R-0543	Non-Participating	353595	4783091	259	255	44	46	44	45	47
R-0544	Non-Participating	347776	4779957	249	245	45	47	44	45	47
R-0545	Non-Participating	348874	4779394	249	245	42	44	41	43	44
R-0549	Non-Participating	362794	4781920	234	230	43	45	43	44	46
R-0551	Non-Participating	366610	4781883	229	225	43	45	43	44	46
R-0552	Non-Participating	366320	4782076	229	225	45	47	44	46	47
R-0567	Non-Participating	353357	4788291	247	243	45	47	44	46	47
R-0568	Participating	349437	4785298	249	245	40	42	40	41	43
R-0569	Non-Participating	352282	4786353	249	245	44	46	44	45	47
R-0582	Non-Participating	354283	4783708	249	245	41	43	41	42	44
R-0583	Non-Participating	353652	4781021	250	246	43	45	43	44	46
R-0584	Non-Participating	353654	4781230	251	247	44	46	44	45	46
R-0590	Participating	365477	4783576	231	227	50	52	49	51	52
R-0603	Non-Participating	350984	4789593	244	240	40	42	39	41	42
R-0604	Non-Participating	352917	4785568	249	245	40	42	40	41	43
R-0619	Non-Participating	353699	4783231	256	252	44	46	43	44	46
R-0620	Non-Participating	352334	4779938	252	248	42	43	41	42	44
R-0623	Participating	359914	4781721	234	230	44	46	44	45	46
R-0626	Non-Participating	363015	4781526	234	230	42	44	42	43	45
R-0628	Non-Participating	366386	4779721	226	222	39	41	38	40	41
R-0629	Non-Participating	366071	4780197	229	225	43	45	42	44	45
R-0630	Non-Participating	367144	4780322	225	221	38	40	38	39	41
R-0644	Participating	353300	4789305	251	247	46	48	46	47	49
R-0645	Non-Participating	350133	4787814	244	240	46	48	46	47	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0658	Non-Participating	360460	4784996	234	230	47	49	46	47	49
R-0659	Non-Participating	367341	4788441	229	225	39	41	39	40	42
R-0660	Non-Participating	363036	4784528	230	226	47	49	46	48	49
R-0661	Non-Participating	364766	4784347	229	225	47	49	46	47	49
R-0664	Non-Participating	353320	4783350	259	255	42	43	41	42	44
R-0665	Non-Participating	347415	4780627	249	245	44	46	43	44	46
R-0666	Non-Participating	348909	4779749	249	245	45	46	44	45	47
R-0667	Non-Participating	358424	4783366	236	232	39	41	39	40	42
R-0668	Non-Participating	358332	4783505	237	233	39	41	39	40	41
R-0670	Non-Participating	364850	4780177	230	226	41	43	41	42	44
R-0694	Non-Participating	351952	4785593	254	250	41	43	41	42	44
R-0714	Participating	362903	4788587	234	230	45	47	44	46	47
R-0718	Non-Participating	348649	4782834	258	254	43	45	43	44	46
R-0721	Participating	355438	4781672	249	245	50	52	49	50	52
R-0722	Non-Participating	358439	4782080	236	232	42	44	41	43	44
R-0725	Participating	365609	4783498	231	227	51	53	50	51	53
R-0726	Non-Participating	367189	4783199	229	225	40	42	40	41	43
R-0741	Non-Participating	352472	4789622	250	246	39	41	39	40	42
R-0742	Non-Participating	352497	4786393	249	245	45	47	44	46	47
R-0754	Non-Participating	354824	4787148	244	240	39	41	39	40	42
R-0755	Non-Participating	362783	4789633	235	231	41	43	41	42	43
R-0757	Non-Participating	363007	4786866	234	230	49	51	48	49	51
R-0758	Non-Participating	366585	4786825	226	222	44	46	44	45	47
R-0759	Non-Participating	365805	4786702	229	225	49	50	48	49	51
R-0760	Non-Participating	366932	4786826	224	220	42	44	42	43	45
R-0761	Participating	348415	4783184	254	250	46	48	45	47	48
R-0762	Non-Participating	348745	4783232	258	254	43	45	43	44	46
R-0764	Participating	361458	4783489	234	230	48	50	47	48	50
R-0787	Non-Participating	353721	4789493	249	245	46	48	45	46	48
R-0788	Non-Participating	350166	4787427	244	240	50	52	49	50	52
R-0789	Non-Participating	351753	4786189	249	245	45	47	44	45	47
R-0790	Non-Participating	353539	4785351	246	242	39	41	39	40	41
R-0804	Non-Participating	356177	4788034	239	235	45	46	44	45	47
R-0805	Non-Participating	359979	4784313	234	230	42	44	42	43	44
R-0807	Participating	364619	4786053	230	226	51	53	51	52	54
R-0808	Non-Participating	347330	4783732	248	244	46	47	45	46	48
R-0809	Non-Participating	348693	4783142	259	255	44	45	43	44	46
R-0810	Non-Participating	348790	4783177	258	254	43	45	43	44	45
R-0811	Non-Participating	348489	4783224	253	249	45	47	45	46	48
R-0813	Non-Participating	351470	4780102	254	250	49	51	48	49	51
R-0815	Non-Participating	353690	4780021	249	245	40	42	40	41	43
R-0817	Non-Participating	359625	4783390	234	230	42	44	42	43	45
R-0818	Non-Participating	355217	4779321	249	245	40	42	40	41	43
R-0819	Participating	361942	4783560	230	226	48	50	47	49	50
R-0829	Non-Participating	346861	4786326	245	241	41	43	41	42	43
R-0830	Non-Participating	346923	4786346	245	241	41	43	41	42	44
R-0833	Non-Participating	352575	4790182	251	247	37	39	37	38	40
R-0834	Participating	350967	4784789	254	250	40	41	39	41	42
R-0835	Participating	354179	4785353	244	240	38	40	38	39	41
R-0844	Non-Participating	355381	4789532	239	235	49	51	48	49	51
R-0845	Non-Participating	360439	4788269	234	230	46	48	46	47	48
R-0846	Participating	365659	4789709	230	226	47	49	46	48	49
R-0847	Participating	361706	4785097	234	230	48	49	47	48	50
R-0849	Non-Participating	366367	4785547	226	222	44	45	43	44	46
R-0852	Non-Participating	350236	4784342	254	250	40	42	40	41	42
R-0854	Non-Participating	353594	4782955	258	254	45	47	45	46	48
R-0855	Non-Participating	349657	4778935	250	246	39	41	39	40	42
R-0856	Non-Participating	350483	4778978	244	240	39	41	39	40	41
R-0860	Non-Participating	358349	4779836	244	240	37	39	37	38	40
R-0861	Non-Participating	361757	4783419	232	228	47	49	46	48	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0862	Non-Participating	365168	4783478	229	225	48	50	48	49	50
R-0864	Non-Participating	367023	4781877	229	225	41	43	41	42	43
R-0877	Non-Participating	349309	4789596	240	236	44	46	43	44	46
R-0880	Non-Participating	352706	4790634	244	240	36	38	36	37	38
R-0883	Participating	351132	4786506	249	245	50	52	49	50	52
R-0884	Non-Participating	351822	4785663	254	250	42	43	41	42	44
R-0899	Non-Participating	348574	4784385	249	245	42	44	41	43	44
R-0900	Non-Participating	347255	4782942	251	247	43	45	43	44	46
R-0902	Non-Participating	348391	4783181	253	249	46	48	46	47	49
R-0903	Non-Participating	352827	4780600	249	245	41	43	41	42	44
R-0906	Non-Participating	358531	4783351	236	232	40	42	40	41	42
R-0907	Non-Participating	357700	4779408	241	237	38	40	38	39	41
R-0909	Non-Participating	364863	4780757	231	227	44	46	44	45	47
R-0911	Non-Participating	366682	4781880	229	225	43	45	42	44	45
R-0923	Non-Participating	352653	4790472	248	244	36	38	36	37	39
R-0938	Non-Participating	362933	4786510	234	230	49	51	48	50	51
R-0939	Participating	364650	4784253	229	225	47	48	46	47	49
R-0941	Non-Participating	348712	4781733	249	245	46	48	45	46	48
R-0942	Non-Participating	351890	4783188	259	255	42	43	41	43	44
R-0943	Non-Participating	352457	4781570	253	249	42	44	42	43	45
R-0946	Non-Participating	354683	4783259	249	245	43	45	43	44	46
R-0947	Participating	364346	4781020	232	228	43	45	42	44	45
R-0963	Non-Participating	348563	4787320	244	240	47	49	46	47	49
R-0964	Non-Participating	353479	4786461	246	242	45	47	44	46	47
R-0979	Non-Participating	357249	4789564	244	240	40	41	39	40	42
R-0980	Non-Participating	354684	4789575	239	235	43	45	42	44	45
R-0981	Participating	360481	4785112	234	230	48	50	47	49	50
R-0982	Non-Participating	362406	4789633	236	232	40	42	40	41	43
R-0985	Participating	348134	4783230	252	248	51	53	50	51	53
R-0986	Non-Participating	348926	4782375	250	246	44	45	43	44	46
R-0987	Non-Participating	351996	4782525	266	262	43	45	42	44	45
R-0988	Non-Participating	350465	4779993	259	255	44	46	44	45	46
R-0992	Participating	355141	4781010	249	245	53	55	52	53	55
R-0993	Non-Participating	356856	4781315	244	240	46	47	45	46	48
R-0996	Non-Participating	361865	4781551	234	230	40	42	40	41	43
R-0997	Non-Participating	366516	4783607	229	225	44	46	44	45	47
R-0998	Non-Participating	364578	4780320	231	227	41	43	40	42	43
R-1008	Non-Participating	348576	4789864	242	238	38	39	37	39	40
R-1011	Non-Participating	350954	4790247	243	239	37	39	37	38	40
R-1015	Participating	350765	4786537	249	245	52	54	51	52	54
R-1016	Non-Participating	351690	4786390	249	245	47	49	46	47	49
R-1026	Non-Participating	358928	4788115	245	241	41	42	41	41	42
R-1027	Participating	363694	4789685	234	230	45	47	45	46	48
R-1028	Non-Participating	367299	4788370	229	225	40	41	39	41	42
R-1030	Non-Participating	348683	4783055	259	255	44	45	43	44	46
R-1031	Participating	348335	4783229	253	249	47	49	47	48	50
R-1033	Participating	357049	4781795	241	237	42	44	42	43	45
R-1034	Non-Participating	358562	4783351	236	232	40	42	40	41	42
R-1047	Non-Participating	350343	4790924	244	240	35	37	35	36	38
R-1048	Participating	349507	4788971	240	236	51	53	50	51	53
R-1053	Non-Participating	352640	4785522	251	247	40	42	40	41	43
R-1064	Non-Participating	354861	4790858	239	235	37	39	37	38	39
R-1065	Non-Participating	364205	4789659	234	230	48	50	47	48	50
R-1066	Non-Participating	365954	4789691	229	225	45	47	44	45	47
R-1069	Non-Participating	353849	4783228	254	250	44	46	44	45	47
R-1071	Non-Participating	357938	4783303	238	234	38	40	38	40	41
R-1090	Non-Participating	352505	4785588	251	247	41	42	40	42	43
R-1101	Non-Participating	354603	4788070	244	240	42	44	42	43	44
R-1106	Participating	366213	4786855	229	225	47	49	47	48	50
R-1108	Participating	350253	4782981	255	251	47	49	46	47	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1109	Participating	350347	4780661	249	245	49	51	49	50	52
R-1111	Non-Participating	363678	4783467	229	225	47	49	46	47	49
R-1113	Non-Participating	364040	4780405	233	229	40	41	39	41	42
R-1129	Non-Participating	353254	4790861	241	237	36	37	35	37	38
R-1131	Non-Participating	349342	4786382	249	245	43	45	42	44	45
R-1132	Non-Participating	349547	4785304	249	245	40	42	40	41	43
R-1133	Non-Participating	351851	4787471	244	240	47	49	46	48	49
R-1148	Participating	359918	4784683	234	230	43	44	42	43	45
R-1150	Non-Participating	364504	4790913	234	230	39	41	39	40	42
R-1151	Non-Participating	365175	4789775	231	227	49	51	48	50	51
R-1152	Non-Participating	366272	4787684	229	225	47	49	47	48	50
R-1153	Non-Participating	350498	4783716	254	250	42	44	41	43	44
R-1154	Non-Participating	348691	4782611	254	250	43	45	42	44	45
R-1157	Non-Participating	355307	4783372	244	240	41	43	41	42	44
R-1158	Non-Participating	357226	4781799	239	235	42	43	41	42	44
R-1159	Participating	364843	4781970	229	225	46	48	46	47	49
R-1160	Non-Participating	366480	4781010	226	222	45	47	45	46	47
R-1162	Non-Participating	366172	4780302	228	224	44	45	43	44	46
R-1175	Non-Participating	352433	4786394	249	245	45	47	44	45	47
R-1177	Non-Participating	353455	4785196	248	244	39	40	38	40	41
R-1186	Non-Participating	354971	4789811	239	235	43	45	42	44	45
R-1187	Participating	354452	4785754	244	240	38	40	38	39	41
R-1188	Participating	359207	4786553	239	235	46	46	46	46	47
R-1191	Non-Participating	367281	4788438	229	225	40	41	39	41	42
R-1192	Non-Participating	362996	4785037	230	226	48	50	47	48	50
R-1193	Non-Participating	348461	4783165	254	250	46	47	45	46	48
R-1194	Non-Participating	350467	4783250	259	255	45	47	45	46	48
R-1195	Non-Participating	347357	4782092	254	250	40	42	40	41	43
R-1196	Participating	352423	4782513	260	256	42	43	41	43	44
R-1198	Non-Participating	357004	4781433	241	237	44	46	43	45	46
R-1199	Non-Participating	358398	4783361	235	231	39	41	39	40	42
R-1200	Non-Participating	364854	4782807	229	225	47	49	46	48	49
R-1201	Participating	366923	4783523	229	225	42	44	41	43	44
R-1216	Non-Participating	352743	4790350	249	245	37	39	37	38	39
R-1217	Non-Participating	350013	4786053	259	255	43	45	43	44	46
R-1231	Non-Participating	348408	4783147	254	250	46	48	45	47	48
R-1232	Non-Participating	348766	4783233	258	254	43	45	43	44	46
R-1233	Non-Participating	349574	4783050	259	255	43	45	42	44	45
R-1234	Non-Participating	347870	4779936	249	245	45	47	44	46	47
R-1236	Participating	361894	4781896	234	230	41	43	41	42	44
R-1237	Non-Participating	366490	4781427	227	223	45	47	45	46	47
R-1245	Participating	351869	4787028	245	241	50	52	49	50	52
R-1263	Non-Participating	362882	4790131	234	230	40	41	39	41	42
R-1265	Non-Participating	362965	4785442	230	226	49	51	48	49	51
R-1266	Non-Participating	365162	4786682	229	225	50	52	50	51	52
R-1269	Non-Participating	348789	4782891	257	253	43	45	42	44	45
R-1270	Non-Participating	350955	4783136	258	254	47	49	46	47	49
R-1271	Non-Participating	352366	4779910	251	247	41	43	41	42	44
R-1272	Participating	355057	4783386	246	242	42	44	41	43	44
R-1273	Non-Participating	355288	4781779	249	245	50	52	49	50	52
R-1274	Non-Participating	359992	4782429	234	230	46	48	46	47	49
R-1286	Non-Participating	347126	4787750	249	245	39	41	38	40	41
R-1291	Non-Participating	350929	4784905	254	250	40	42	39	41	42
R-1306	Non-Participating	356252	4789757	239	235	44	46	43	45	46
R-1308	Non-Participating	364602	4790490	234	230	42	43	41	42	44
R-1309	Non-Participating	366137	4789303	229	225	45	47	44	46	47
R-1310	Non-Participating	367490	4788158	229	225	39	41	39	40	42
R-1311	Non-Participating	363077	4787263	234	230	49	51	48	49	51
R-1312	Non-Participating	367147	4786849	225	221	41	43	41	42	43
R-1315	Non-Participating	348477	4783188	254	250	45	47	45	46	48

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1316	Non-Participating	351781	4782616	264	260	44	46	43	45	46
R-1317	Non-Participating	352181	4780895	249	245	44	46	44	45	47
R-1319	Non-Participating	356984	4778590	240	236	36	38	36	37	39
R-1320	Participating	366342	4781895	230	226	45	47	45	46	48
R-1321	Non-Participating	366742	4780587	226	222	42	43	41	42	44
R-1338	Non-Participating	347270	4784921	245	241	43	45	43	44	46
R-1339	Non-Participating	348340	4785165	244	240	45	46	44	45	47
R-1347	Non-Participating	366845	4787594	229	225	43	45	42	44	45
R-1348	Non-Participating	367243	4788355	229	225	40	42	40	41	42
R-1349	Non-Participating	362993	4787305	234	230	49	51	48	50	51
R-1350	Non-Participating	362186	4785023	234	230	49	51	49	50	52
R-1353	Non-Participating	347464	4784377	246	242	43	44	42	43	45
R-1355	Non-Participating	352069	4779973	259	255	43	45	43	44	46
R-1356	Non-Participating	353561	4779820	249	245	39	41	39	40	42
R-1358	Participating	355076	4783267	248	244	42	44	42	43	45
R-1359	Non-Participating	355243	4782936	249	245	43	45	43	44	46
R-1361	Non-Participating	366437	4783601	229	225	45	47	44	46	47
R-1366	Non-Participating	347117	4786271	244	240	43	45	42	44	45
R-1368	Non-Participating	352585	4790582	247	243	36	38	36	37	38
R-1372	Non-Participating	352463	4789582	249	245	39	41	39	40	42
R-1373	Non-Participating	353874	4789574	247	243	45	47	44	45	47
R-1374	Non-Participating	350320	4785425	259	255	41	43	41	42	43
R-1384	Non-Participating	354379	4786395	244	240	39	41	39	40	42
R-1387	Participating	362616	4788355	234	230	45	46	44	45	47
R-1389	Non-Participating	350219	4779603	252	248	42	44	42	43	45
R-1390	Non-Participating	354911	4780024	249	245	43	45	43	44	46
R-1392	Participating	366356	4781165	227	223	47	49	46	47	49
R-1407	Non-Participating	352651	4790521	247	243	36	38	36	37	39
R-1410	Non-Participating	353445	4785363	246	242	39	41	39	40	42
R-1411	Non-Participating	353429	4785799	246	242	41	42	40	41	43
R-1415	Participating	354366	4786056	244	240	39	40	38	40	41
R-1418	Non-Participating	348708	4782944	259	255	43	45	43	44	46
R-1420	Non-Participating	353747	4781553	254	250	46	48	45	46	48
R-1421	Participating	351960	4780075	259	255	45	47	44	45	47
R-1422	Non-Participating	353691	4779994	249	245	40	42	40	41	43
R-1428	Non-Participating	358417	4780485	239	235	38	40	38	39	41
R-1430	Non-Participating	365368	4783561	231	227	50	52	49	50	52
R-1431	Non-Participating	367393	4782042	227	223	39	41	39	40	42
R-1432	Non-Participating	364657	4780325	231	227	41	43	41	42	44
R-1433	Non-Participating	366478	4780094	227	223	41	42	40	41	43
R-1448	Non-Participating	352569	4790340	249	245	37	39	36	38	39
R-1450	Non-Participating	354397	4788077	244	240	42	44	42	43	45
R-1451	Non-Participating	349375	4786854	244	240	43	45	43	44	46
R-1461	Non-Participating	360525	4788264	234	230	47	49	46	47	49
R-1464	Non-Participating	367061	4789847	229	225	38	40	38	39	41
R-1466	Non-Participating	363011	4786196	232	228	49	51	48	50	51
R-1467	Non-Participating	351914	4782515	269	265	43	45	43	44	46
R-1469	Non-Participating	351293	4779962	249	245	46	48	45	47	48
R-1470	Participating	361174	4782213	234	230	44	46	44	45	47
R-1471	Non-Participating	358358	4779712	244	240	37	39	37	38	40
R-1472	Non-Participating	362559	4783608	229	225	46	48	46	47	49
R-1473	Participating	364685	4784020	229	225	46	48	46	47	49
R-1474	Non-Participating	365509	4783480	232	228	51	53	50	51	53
R-1475	Non-Participating	367313	4783491	229	225	40	42	39	41	42
R-1490	Participating	350360	4786469	249	245	48	50	47	49	50
R-1507	Non-Participating	366507	4784031	230	226	44	46	44	45	47
R-1508	Non-Participating	366360	4784383	231	227	45	47	44	46	47
R-1509	Non-Participating	348620	4783179	257	253	44	46	44	45	46
R-1510	Participating	350413	4782395	252	248	52	54	51	52	54
R-1511	Non-Participating	351383	4783309	259	255	43	45	43	44	45

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1515	Non-Participating	354376	4783345	251	247	44	45	43	44	46
R-1516	Non-Participating	356977	4781696	242	238	43	45	42	44	45
R-1517	Non-Participating	356745	4781373	244	240	46	48	45	46	48
R-1518	Non-Participating	358114	4779321	244	240	37	38	36	38	39
R-1519	Non-Participating	363073	4784068	229	225	46	48	46	47	48
R-1554	Non-Participating	354239	4783929	249	245	40	42	40	41	43
R-1557	Non-Participating	360153	4783487	234	230	43	45	43	44	46
R-1558	Non-Participating	355931	4780038	244	240	47	48	46	47	49
R-1561	Non-Participating	366577	4781734	229	225	44	46	43	45	46
R-1562	Non-Participating	366426	4781776	229	225	45	47	44	46	47
R-1576	Non-Participating	352579	4790284	249	245	37	39	37	38	39
R-1579	Non-Participating	347256	4786218	244	240	44	46	44	45	47
R-1580	Non-Participating	349930	4786381	252	248	44	46	44	45	47
R-1581	Non-Participating	348659	4784874	247	243	42	44	41	43	44
R-1582	Non-Participating	351676	4786392	249	245	47	49	46	47	49
R-1590	Non-Participating	357931	4788237	239	235	39	40	39	40	41
R-1591	Non-Participating	366660	4789971	229	225	40	41	39	41	42
R-1593	Non-Participating	366946	4786760	224	220	42	44	42	43	44
R-1599	Participating	347347	4783242	250	246	46	48	46	47	48
R-1600	Non-Participating	348476	4781551	249	245	46	47	45	46	48
R-1601	Non-Participating	356464	4779954	241	237	47	49	46	47	49
R-1602	Non-Participating	357851	4779397	242	238	38	39	37	39	40
R-1630	Non-Participating	361543	4786047	234	230	48	50	47	48	50
R-1633	Non-Participating	351973	4783203	259	255	41	43	41	42	44
R-1634	Participating	350720	4781672	254	250	52	54	51	52	54
R-1635	Non-Participating	348862	4779250	251	247	41	43	41	42	43
R-1636	Non-Participating	352485	4779896	248	244	41	43	40	42	43
R-1638	Non-Participating	361957	4781478	234	230	40	42	40	41	42
R-1646	Non-Participating	347039	4786373	244	240	42	44	42	43	44
R-1647	Non-Participating	352437	4790383	249	245	36	38	36	37	39
R-1648	Non-Participating	352545	4790388	249	245	36	38	36	38	39
R-1649	Non-Participating	352590	4790395	249	245	37	38	36	38	39
R-1651	Non-Participating	350908	4789458	244	240	41	43	40	41	43
R-1652	Non-Participating	349363	4787074	244	240	44	45	43	44	46
R-1653	Non-Participating	350357	4785199	254	250	40	42	40	41	43
R-1654	Non-Participating	353386	4786433	246	242	45	47	45	46	48
R-1672	Non-Participating	357707	4789534	241	237	38	40	38	39	40
R-1674	Participating	361459	4784376	234	230	47	49	47	48	49
R-1678	Non-Participating	347186	4783008	250	246	43	45	43	44	45
R-1680	Non-Participating	347290	4782087	254	250	40	42	40	41	43
R-1681	Non-Participating	352856	4781628	249	245	42	44	42	43	44
R-1684	Non-Participating	358281	4783362	236	232	39	41	39	40	42
R-1685	Non-Participating	358767	4783525	237	233	40	42	40	41	42
R-1686	Non-Participating	358401	4781273	239	235	40	42	40	41	42
R-1703	Participating	353438	4788661	247	243	50	53	50	51	53
R-1704	Non-Participating	352873	4785415	250	246	40	42	39	41	42
R-1718	Non-Participating	359746	4788133	239	235	44	45	43	44	45
R-1719	Non-Participating	364498	4790289	234	230	43	45	42	44	45
R-1720	Non-Participating	367397	4786589	224	220	40	41	39	41	42
R-1721	Non-Participating	346770	4781622	254	250	38	40	38	39	41
R-1722	Non-Participating	348453	4783080	254	250	45	47	45	46	47
R-1723	Non-Participating	348371	4783172	253	249	47	49	46	47	49
R-1724	Participating	348387	4783223	253	249	47	49	46	47	49
R-1725	Non-Participating	352701	4781726	249	245	42	44	42	43	44
R-1727	Non-Participating	354408	4783525	249	245	42	44	42	43	45
R-1730	Non-Participating	364832	4782282	229	225	47	48	46	47	49
R-1742	Non-Participating	352454	4789822	251	247	38	40	38	39	41
R-1744	Non-Participating	350481	4785391	257	253	41	43	41	42	43
R-1745	Non-Participating	350346	4784875	253	249	40	42	39	41	42
R-1746	Non-Participating	353480	4786425	245	241	45	47	44	45	47

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1747	Non-Participating	350821	4785067	254	250	40	42	40	41	43
R-1748	Non-Participating	354310	4785630	244	240	38	40	38	39	41
R-1761	Non-Participating	354889	4786492	242	238	38	40	38	39	41
R-1762	Non-Participating	366556	4785223	229	225	43	44	42	43	45
R-1764	Non-Participating	348804	4783801	249	245	42	44	42	43	45
R-1765	Non-Participating	348601	4783226	255	251	44	46	44	45	47
R-1766	Non-Participating	360049	4781119	234	230	40	42	39	41	42
R-1783	Non-Participating	351806	4789065	244	240	40	41	39	41	42
R-1784	Non-Participating	353767	4789495	248	244	46	48	45	46	48
R-1798	Non-Participating	348473	4783286	253	249	46	48	45	46	48
R-1800	Non-Participating	355867	4780035	244	240	46	48	46	47	49
R-1803	Non-Participating	366336	4781611	229	225	46	48	46	47	49
R-1818	Non-Participating	353423	4789739	259	255	42	44	42	43	45
R-1819	Participating	353262	4788590	249	245	47	49	46	48	49
R-1820	Non-Participating	347287	4785145	249	245	45	47	44	46	47
R-1831	Non-Participating	355040	4787392	244	240	40	42	39	41	42
R-1834	Non-Participating	363214	4781818	233	229	45	47	44	45	47
R-1839	Non-Participating	347201	4785937	244	240	45	47	45	46	48
R-1840	Non-Participating	352635	4790545	247	243	36	38	36	37	39
R-1842	Participating	351400	4789488	249	245	39	41	39	40	41
R-1844	Non-Participating	351930	4785674	258	254	42	43	41	42	44
R-1854	Non-Participating	355852	4789507	239	235	49	51	48	49	51
R-1856	Participating	362725	4785047	232	228	49	50	48	49	51
R-1857	Non-Participating	347433	4783064	251	247	46	48	45	47	48
R-1858	Non-Participating	350484	4783184	259	255	46	48	46	47	48
R-1859	Non-Participating	353470	4783656	257	253	41	42	40	42	43
R-1860	Non-Participating	353320	4783189	259	255	42	44	42	43	45
R-1861	Non-Participating	351988	4782197	259	255	43	45	43	44	46
R-1862	Non-Participating	348949	4779319	250	246	41	43	41	42	44
R-1864	Non-Participating	358307	4781605	239	235	40	42	40	41	43
R-1866	Non-Participating	363008	4783446	229	225	46	47	45	46	48
R-1867	Participating	364766	4784047	229	225	46	48	46	47	49
R-1876	Non-Participating	349583	4789478	240	236	48	50	47	48	50
R-1878	Non-Participating	352548	4790359	249	245	37	38	36	38	39
R-1879	Non-Participating	350907	4788371	244	240	44	45	43	44	46
R-1880	Non-Participating	350440	4784870	254	250	40	42	39	41	42
R-1881	Non-Participating	354261	4786558	244	240	40	42	40	41	42
R-1891	Non-Participating	362878	4789040	234	230	43	45	43	44	46
R-1892	Participating	364533	4788754	232	228	50	52	49	50	52
R-1893	Non-Participating	346539	4783106	249	245	39	41	38	40	41
R-1897	Participating	357821	4781881	239	235	40	42	40	41	43
R-1898	Non-Participating	360652	4781946	234	230	42	44	42	43	45
R-1913	Non-Participating	347229	4787832	249	245	39	41	39	40	41
R-1919	Non-Participating	352126	4785781	251	247	42	44	41	43	44
R-1935	Non-Participating	354558	4786487	244	240	39	41	39	40	41
R-1940	Participating	364632	4785716	230	226	52	54	51	53	54
R-1943	Non-Participating	352081	4779903	259	255	43	45	42	43	45
R-1944	Non-Participating	359194	4783432	235	231	41	43	41	42	44
R-1945	Non-Participating	358340	4779916	243	239	37	39	37	39	40
R-1946	Non-Participating	366486	4783734	229	225	45	46	44	45	47
R-1964	Non-Participating	352564	4790365	249	245	37	38	36	38	39
R-1966	Non-Participating	347241	4786755	245	241	43	45	42	43	45
R-1967	Non-Participating	347451	4785127	249	245	46	48	46	47	49
R-1968	Non-Participating	351928	4786623	248	244	47	49	46	48	49
R-1979	Non-Participating	359521	4785059	234	230	42	44	42	43	44
R-1980	Non-Participating	367390	4788337	229	225	39	41	39	40	42
R-1981	Non-Participating	366376	4785227	229	225	43	45	43	44	46
R-1983	Non-Participating	351995	4782418	264	260	43	45	43	44	45
R-1984	Non-Participating	353127	4780114	249	245	40	42	40	41	42
R-1985	Non-Participating	353666	4779995	249	245	40	42	40	41	42

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1988	Non-Participating	358019	4783427	237	233	38	40	38	40	41
R-1992	Non-Participating	367236	4783419	229	225	40	42	40	41	43
R-1993	Non-Participating	367350	4782039	228	224	39	41	39	40	42
R-1999	Non-Participating	348600	4789256	243	239	40	41	39	40	42
R-2000	Non-Participating	350247	4789174	244	240	48	50	48	49	50
R-2016	Participating	356396	4788635	239	235	52	54	51	52	54
R-2017	Non-Participating	360874	4788272	234	230	48	50	47	49	50
R-2021	Non-Participating	348762	4782964	257	253	43	45	43	44	45
R-2022	Non-Participating	351870	4781838	256	252	44	46	44	45	47
R-2023	Non-Participating	353283	4781595	251	247	43	45	43	44	46
R-2026	Non-Participating	366425	4781862	229	225	45	47	44	45	47
R-2033	Non-Participating	352636	4790576	246	242	36	38	36	37	38
R-2053	Non-Participating	363119	4785026	230	226	48	50	47	49	50
R-2054	Non-Participating	347340	4783358	249	245	47	49	46	47	49
R-2055	Non-Participating	350470	4783617	254	250	42	44	42	43	45
R-2056	Non-Participating	350300	4782177	251	247	49	51	49	50	51
R-2057	Non-Participating	352738	4781487	249	245	42	44	41	43	44
R-2058	Non-Participating	353541	4781559	253	249	45	46	44	45	47
R-2059	Non-Participating	350633	4779921	249	245	44	46	43	45	46
R-2061	Non-Participating	357303	4781801	239	235	41	43	41	42	44
R-2073	Participating	348734	4785206	245	241	42	44	42	43	45
R-2085	Non-Participating	356310	4789830	239	235	43	45	42	44	45
R-2089	Non-Participating	363996	4789657	234	230	47	49	47	48	49
R-2090	Non-Participating	366310	4787658	229	225	47	49	46	48	49
R-2092	Non-Participating	366856	4784503	234	230	42	43	41	43	44
R-2093	Non-Participating	348385	4782866	255	251	44	46	44	45	47
R-2094	Non-Participating	350179	4783166	258	254	45	47	44	46	47
R-2095	Non-Participating	350437	4783446	254	250	44	46	43	44	46
R-2096	Non-Participating	348720	4781077	249	245	50	52	49	50	52
R-2097	Non-Participating	351949	4783897	262	258	40	41	39	41	42
R-2098	Participating	348350	4780200	249	245	51	53	50	51	53
R-2100	Non-Participating	352068	4779825	259	255	42	44	42	43	45
R-2102	Non-Participating	355112	4782928	249	245	44	46	43	45	46
R-2103	Participating	354829	4780986	249	245	51	53	50	51	53
R-2104	Non-Participating	356837	4781670	244	240	44	45	43	44	46
R-2105	Non-Participating	357366	4780182	239	235	43	45	43	44	46
R-2106	Non-Participating	357834	4780084	239	235	40	42	39	41	42
R-2116	Non-Participating	349346	4788650	242	238	46	48	45	46	48
R-2119	Non-Participating	352495	4790345	249	245	37	38	36	38	39
R-2121	Non-Participating	353261	4790121	253	249	39	41	39	40	42
R-2122	Non-Participating	349528	4785585	251	247	41	43	41	42	43
R-2123	Non-Participating	353389	4785180	248	244	39	40	38	40	41
R-2133	Non-Participating	356381	4788189	239	235	46	48	45	46	48
R-2134	Participating	363136	4787652	234	230	50	51	49	50	52
R-2135	Participating	365355	4786713	229	225	50	52	49	50	52
R-2136	Non-Participating	349960	4783262	264	260	43	45	43	44	46
R-2137	Non-Participating	351867	4782892	259	255	43	44	42	43	45
R-2138	Participating	359639	4783447	234	230	42	44	42	43	44
R-2159	Participating	350970	4790156	243	239	38	40	37	39	40
R-2161	Non-Participating	351878	4786326	249	245	45	47	45	46	48
R-2162	Non-Participating	353109	4785384	249	245	39	41	39	40	42
R-2173	Non-Participating	354915	4786915	243	239	39	41	39	40	41
R-2175	Non-Participating	364519	4788388	232	228	48	50	48	49	50
R-2176	Non-Participating	363019	4784859	230	226	48	49	47	48	50
R-2177	Non-Participating	365368	4786771	229	225	49	51	49	50	52
R-2178	Non-Participating	367647	4786975	229	225	39	41	39	40	41
R-2179	Non-Participating	346444	4782336	254	250	37	39	37	38	40
R-2180	Non-Participating	347687	4783034	252	248	48	50	48	49	51
R-2181	Non-Participating	348839	4782901	254	250	43	45	42	44	45
R-2182	Non-Participating	353641	4780210	249	245	41	42	40	42	43

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2184	Non-Participating	355107	4783199	248	244	43	44	42	43	45
R-2185	Participating	357815	4781688	239	235	40	42	40	41	43
R-2186	Non-Participating	360731	4782310	234	230	45	47	44	45	47
R-2187	Non-Participating	356621	4778546	241	237	37	38	36	38	39
R-2188	Participating	364945	4781985	229	225	46	48	46	47	49
R-2189	Non-Participating	367475	4783649	228	224	39	41	39	40	42
R-2204	Non-Participating	352592	4789714	254	250	39	41	39	40	42
R-2205	Non-Participating	352548	4790338	249	245	37	38	36	38	39
R-2206	Non-Participating	352478	4790483	249	245	36	38	36	37	39
R-2208	Non-Participating	347310	4784619	244	240	42	44	42	43	44
R-2209	Non-Participating	352488	4786539	248	244	46	48	45	47	48
R-2210	Non-Participating	352594	4785693	249	245	41	43	41	42	43
R-2219	Non-Participating	363107	4788758	234	230	45	47	44	46	47
R-2221	Non-Participating	348803	4783307	254	250	43	45	43	44	45
R-2222	Participating	350570	4783258	258	254	46	48	45	46	48
R-2223	Non-Participating	352057	4783203	259	255	41	43	41	42	44
R-2224	Non-Participating	353593	4783360	260	256	42	44	42	43	45
R-2226	Non-Participating	356937	4778921	240	236	38	40	38	39	40
R-2227	Non-Participating	361574	4783247	231	227	48	50	47	48	50
R-2240	Non-Participating	350076	4788118	244	240	45	47	44	45	47
R-2243	Non-Participating	352413	4786490	249	245	45	47	45	46	48
R-2244	Non-Participating	351051	4784900	254	250	40	42	39	41	42
R-2245	Non-Participating	354145	4785642	244	240	38	40	38	39	41
R-2246	Participating	353510	4785759	245	241	40	42	40	41	43
R-2247	Non-Participating	353524	4786051	245	241	42	43	41	42	44
R-2248	Non-Participating	353437	4785014	249	245	38	40	38	40	41
R-2257	Non-Participating	355016	4788165	240	236	43	45	42	44	45
R-2260	Non-Participating	360876	4784992	234	230	49	50	48	49	51
R-2261	Non-Participating	366146	4789455	229	225	44	46	44	45	47
R-2263	Participating	362966	4787639	234	230	49	50	48	49	51
R-2264	Non-Participating	366665	4784967	229	225	42	44	42	43	45
R-2265	Non-Participating	366381	4784523	231	227	44	46	44	45	47
R-2266	Non-Participating	348460	4783042	254	250	45	47	44	46	47
R-2267	Non-Participating	348448	4783134	254	250	46	47	45	46	48
R-2268	Non-Participating	350182	4783471	257	253	43	45	42	44	45
R-2269	Non-Participating	350743	4783272	259	255	46	48	45	46	48
R-2270	Non-Participating	354245	4783327	251	247	44	46	43	45	46
R-2271	Non-Participating	350334	4780435	249	245	47	49	47	48	50
R-2273	Non-Participating	358273	4783689	239	235	39	40	38	40	41
R-2274	Non-Participating	363136	4781983	233	229	45	47	45	46	48
R-2276	Non-Participating	366825	4780293	226	222	40	42	39	41	42
R-2290	Non-Participating	353298	4789965	254	250	40	42	40	41	43
R-2291	Non-Participating	352373	4785675	250	246	41	43	41	42	43
R-2302	Non-Participating	359989	4788177	236	232	45	46	44	45	46
R-2303	Non-Participating	361503	4787333	234	230	48	50	47	48	50
R-2304	Non-Participating	361365	4787375	234	230	49	50	48	49	51
R-2305	Non-Participating	367650	4786923	229	225	39	41	39	40	41
R-2309	Non-Participating	349995	4779318	250	246	41	43	40	42	43
R-2330	Non-Participating	353290	4790184	249	245	39	41	38	40	41
R-2331	Non-Participating	349453	4787508	244	240	43	45	43	44	46
R-2332	Non-Participating	352558	4787508	245	241	46	47	45	46	48
R-2342	Non-Participating	356529	4788990	239	235	49	51	48	49	51
R-2344	Non-Participating	358107	4788422	239	235	39	40	38	39	41
R-2347	Non-Participating	364645	4784742	229	225	48	50	47	48	50
R-2348	Non-Participating	367622	4786952	229	225	39	41	39	40	41
R-2350	Non-Participating	347380	4782968	251	247	45	47	44	45	47
R-2351	Participating	350906	4783312	259	255	45	47	44	46	47
R-2353	Non-Participating	355124	4782491	249	245	47	49	46	47	49
R-2354	Non-Participating	354471	4783359	250	246	43	45	43	44	46
R-2355	Non-Participating	356621	4781769	244	240	44	46	43	45	46

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2356	Participating	366336	4781780	229	225	46	48	45	46	48
R-2381	Non-Participating	354765	4789505	239	235	44	46	43	44	46
R-2383	Non-Participating	366139	4789539	229	225	44	46	43	45	46
R-2384	Non-Participating	366705	4789762	229	225	40	42	40	41	42
R-2386	Non-Participating	352225	4779942	255	251	42	44	42	43	44
R-2387	Non-Participating	358446	4783363	236	232	40	41	39	41	42
R-2388	Non-Participating	358995	4783443	236	232	41	43	40	42	43
R-2389	Non-Participating	354649	4780046	249	245	43	44	42	43	45
R-2390	Non-Participating	362385	4782616	234	230	44	46	43	45	46
R-2391	Non-Participating	363591	4783435	229	225	47	49	46	48	49
R-2392	Non-Participating	363767	4781961	231	227	49	51	48	50	51
R-2394	Non-Participating	365839	4780292	229	225	45	47	44	45	47
R-2404	Non-Participating	347073	4788058	249	245	37	39	37	38	40
R-2410	Non-Participating	353116	4789490	259	255	43	45	42	44	45
R-2411	Participating	348103	4786332	244	240	48	50	47	48	50
R-2423	Non-Participating	360775	4789533	238	234	39	41	39	40	41
R-2425	Non-Participating	363072	4788868	234	230	44	46	44	45	47
R-2426	Non-Participating	365320	4788301	230	226	52	54	51	52	54
R-2427	Non-Participating	362585	4785121	232	228	50	52	49	50	52
R-2428	Non-Participating	367018	4786747	224	220	42	43	41	42	44
R-2432	Non-Participating	353422	4783963	253	249	39	41	39	41	42
R-2433	Non-Participating	351955	4779983	259	255	44	46	43	45	46
R-2435	Non-Participating	358304	4782359	236	232	41	43	41	42	43
R-2436	Non-Participating	366744	4783641	229	225	43	45	42	44	45
R-2453	Non-Participating	347272	4785511	246	242	48	50	47	48	50
R-2454	Non-Participating	354233	4786082	244	240	39	41	39	40	42
R-2455	Non-Participating	353126	4785358	249	245	39	41	39	40	42
R-2468	Non-Participating	359583	4788238	239	235	43	44	42	43	44
R-2473	Non-Participating	366308	4789263	229	225	44	46	43	44	46
R-2475	Non-Participating	351990	4783117	259	255	41	43	41	42	44
R-2478	Non-Participating	358278	4783453	236	232	39	41	39	40	41
R-2479	Non-Participating	356982	4779170	240	236	39	41	39	40	42
R-2480	Non-Participating	366937	4781996	229	225	41	43	41	42	44
R-2496	Non-Participating	350853	4790051	242	238	38	40	38	39	41
R-2500	Non-Participating	352585	4789759	254	250	39	41	39	40	41
R-2502	Non-Participating	353388	4790368	246	242	38	40	38	39	41
R-2505	Non-Participating	354319	4785876	244	240	38	40	38	39	41
R-2514	Non-Participating	354618	4786462	244	240	39	41	38	40	41
R-2515	Participating	361323	4786737	234	230	48	49	47	48	50
R-2516	Non-Participating	363111	4789013	234	230	44	46	44	45	47
R-2517	Participating	364443	4788271	232	228	48	50	47	49	50
R-2519	Non-Participating	363619	4785163	229	225	50	52	49	50	52
R-2520	Participating	364582	4784993	229	225	49	51	48	50	51
R-2525	Non-Participating	353573	4783669	254	250	41	43	40	42	43
R-2526	Non-Participating	352915	4783366	259	255	40	42	40	41	43
R-2527	Non-Participating	354157	4783333	251	247	44	46	43	45	46
R-2528	Participating	348656	4780734	249	245	52	54	51	53	54
R-2532	Non-Participating	355590	4781749	249	245	48	50	48	49	51
R-2533	Non-Participating	356619	4781679	244	240	44	46	44	45	47
R-2534	Non-Participating	358479	4783363	236	232	40	41	39	41	42
R-2535	Non-Participating	358264	4783398	236	232	39	41	39	40	42
R-2536	Non-Participating	355642	4780052	245	241	46	48	45	46	48
R-2537	Non-Participating	357659	4779281	242	238	38	40	37	39	40
R-2551	Non-Participating	349377	4789835	239	235	42	44	41	43	44
R-2552	Non-Participating	352654	4790617	246	242	36	38	36	37	38
R-2556	Non-Participating	352692	4790632	245	241	36	38	36	37	38
R-2560	Non-Participating	351349	4789531	249	245	39	41	39	40	41
R-2570	Non-Participating	359121	4788377	244	240	40	42	40	41	42
R-2571	Non-Participating	354399	4786542	244	240	39	41	39	40	42
R-2573	Non-Participating	358870	4785033	237	233	40	41	40	41	42

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2574	Non-Participating	364601	4790408	233	229	42	44	42	43	44
R-2576	Non-Participating	346415	4782409	253	249	37	39	37	38	40
R-2578	Non-Participating	353471	4784280	249	245	39	41	39	40	41
R-2579	Participating	351923	4782215	259	255	44	46	43	44	46
R-2581	Non-Participating	355189	4780192	249	245	45	47	45	46	48
R-2584	Non-Participating	367130	4782113	229	225	40	42	40	41	43
R-2587	Non-Participating	367622	4780424	227	223	36	38	36	37	39
R-2593	Non-Participating	352678	4790622	245	241	36	38	36	37	38
R-2595	Non-Participating	349511	4785778	253	249	41	43	41	42	44
R-2596	Non-Participating	353043	4785539	249	245	40	42	40	41	42
R-2607	Non-Participating	363308	4788404	234	230	48	50	47	48	50
R-2608	Non-Participating	350383	4784246	254	250	40	42	40	41	43
R-2609	Non-Participating	349825	4782929	257	253	44	46	44	45	46
R-2612	Non-Participating	363723	4781127	233	229	42	44	42	43	44
R-2613	Non-Participating	366299	4783578	229	225	46	48	45	47	48
R-2614	Participating	365397	4781885	229	225	50	52	49	50	52
R-2627	Non-Participating	352603	4790436	249	245	36	38	36	37	39
R-2642	Non-Participating	357630	4788213	240	236	39	41	39	40	41
R-2645	Non-Participating	355057	4787209	244	240	39	41	39	40	42
R-2648	Participating	364334	4784947	229	225	50	52	49	50	52
R-2650	Participating	350362	4782773	254	250	50	52	49	51	52
R-2651	Non-Participating	353432	4784220	249	245	39	41	39	40	41
R-2652	Non-Participating	352496	4779964	247	243	41	43	40	42	43
R-2653	Non-Participating	353701	4780012	249	245	40	42	40	41	43
R-2654	Non-Participating	355619	4783272	244	240	41	43	40	42	43
R-2655	Non-Participating	359575	4783379	234	230	42	44	42	43	45
R-2658	Participating	362740	4783596	229	225	46	48	45	47	48
R-2659	Non-Participating	364693	4783462	229	225	46	48	45	47	48
R-2661	Non-Participating	366534	4781476	227	223	45	47	44	45	47
R-2662	Non-Participating	366386	4779805	226	222	39	41	39	40	42
R-2663	Non-Participating	366345	4780103	227	223	41	43	41	42	44
R-2677	Non-Participating	350703	4789467	244	240	42	44	41	43	44
R-2679	Non-Participating	352492	4790335	249	245	37	38	36	38	39
R-2682	Participating	351865	4787354	244	240	48	50	47	48	50
R-2683	Participating	352738	4785079	256	252	39	41	39	40	42
R-2693	Non-Participating	362905	4788693	234	230	44	46	44	45	47
R-2694	Participating	362152	4788379	234	230	44	46	43	45	46
R-2695	Non-Participating	364670	4787037	231	227	48	50	47	48	50
R-2696	Non-Participating	350267	4783163	258	254	45	47	45	46	48
R-2698	Non-Participating	355141	4780759	249	245	50	52	49	51	52
R-2699	Non-Participating	358286	4781281	239	235	40	42	40	41	42
R-2700	Non-Participating	357032	4780055	239	235	45	47	45	46	48
R-2702	Non-Participating	362456	4782630	234	230	44	46	43	45	46
R-2703	Participating	364797	4783250	229	225	47	48	46	47	49
R-2704	Non-Participating	364414	4783458	229	225	46	48	45	47	48
R-2705	Non-Participating	365910	4782688	232	228	49	51	48	49	51
R-2706	Non-Participating	366902	4783616	230	226	42	44	41	43	44
R-2707	Non-Participating	366495	4781509	228	224	45	47	44	46	47
R-2721	Non-Participating	346290	4786452	246	242	38	40	37	39	40
R-2722	Non-Participating	347237	4786899	245	241	42	44	42	43	45
R-2724	Non-Participating	348549	4790241	242	238	36	38	36	37	39
R-2731	Participating	347260	4785781	244	240	47	49	46	48	49
R-2750	Non-Participating	366325	4789733	229	225	42	44	42	43	44
R-2753	Non-Participating	350250	4779648	252	248	42	44	42	43	45
R-2755	Non-Participating	352098	4779766	258	254	42	44	41	43	44
R-2756	Non-Participating	359952	4780625	234	230	38	40	37	39	40
R-2757	Non-Participating	358292	4779986	241	237	38	40	37	39	40
R-2758	Non-Participating	362471	4783551	229	225	47	48	46	47	49
R-2759	Non-Participating	363717	4783530	229	225	46	48	46	47	49
R-2760	Non-Participating	364704	4783184	229	225	46	48	46	47	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2761	Non-Participating	366390	4783046	230	226	45	47	45	46	47
R-2774	Non-Participating	353642	4786455	244	240	44	45	43	44	46
R-2783	Participating	356509	4788841	239	235	50	52	49	50	52
R-2786	Participating	366187	4788610	229	225	46	48	45	46	48
R-2789	Non-Participating	366385	4784079	230	226	45	47	45	46	48
R-2791	Non-Participating	348698	4782919	259	255	43	45	43	44	46
R-2792	Non-Participating	348568	4783221	254	250	45	47	44	45	47
R-2794	Non-Participating	351939	4781784	254	250	44	46	43	45	46
R-2795	Participating	354073	4780787	249	245	45	46	44	45	47
R-2796	Non-Participating	354776	4783251	249	245	43	45	43	44	46
R-2797	Non-Participating	354331	4781633	252	248	51	53	51	52	53
R-2798	Non-Participating	356610	4780992	243	239	50	52	50	51	52
R-2799	Participating	361318	4782015	234	230	43	44	42	43	45
R-2800	Non-Participating	355334	4780075	248	244	45	47	44	46	47
R-2801	Non-Participating	366506	4781891	229	225	44	46	44	45	46
R-2802	Non-Participating	366614	4780591	226	222	43	44	42	43	45
R-2804	Non-Participating	365568	4780277	229	225	45	47	44	45	47
R-2805	Non-Participating	366636	4780392	227	223	41	43	41	42	44
R-2806	Non-Participating	366423	4779346	228	224	37	39	36	38	39
R-2817	Non-Participating	353967	4790714	239	235	37	39	37	38	39
R-2818	Non-Participating	352825	4785394	251	247	40	42	39	41	42
R-2833	Non-Participating	354080	4783373	250	246	43	45	43	44	46
R-2835	Non-Participating	352095	4779714	256	252	42	43	41	42	44
R-2864	Non-Participating	364590	4790349	233	229	43	44	42	43	45
R-2865	Non-Participating	366472	4785221	229	225	43	45	42	44	45
R-2866	Non-Participating	366522	4784688	231	227	43	45	43	44	46
R-2869	Non-Participating	346894	4781634	254	250	39	41	38	40	41
R-2871	Non-Participating	346564	4780027	249	245	37	39	37	38	39
R-2872	Non-Participating	351154	4783289	259	255	44	46	44	45	47
R-2874	Non-Participating	353740	4780004	249	245	40	42	40	41	43
R-2876	Non-Participating	354357	4783756	248	244	41	43	40	42	43
R-2878	Non-Participating	358327	4783849	239	235	38	40	38	40	41
R-2880	Non-Participating	364846	4780934	231	227	45	47	44	46	47
R-2882	Non-Participating	367212	4782025	229	225	40	42	40	41	42
R-2896	Non-Participating	350702	4786366	249	245	49	51	48	49	51
R-2897	Non-Participating	347575	4785184	248	244	48	50	47	49	50
R-2906	Non-Participating	359605	4788172	239	235	43	44	43	44	45
R-2908	Non-Participating	363203	4784261	229	225	47	49	46	48	49
R-2909	Non-Participating	366140	4785179	224	220	45	46	44	45	47
R-2911	Non-Participating	346973	4781121	251	247	40	42	39	41	42
R-2912	Non-Participating	353906	4783238	254	250	44	46	44	45	47
R-2913	Non-Participating	353653	4780756	249	245	43	44	42	43	45
R-2916	Non-Participating	355304	4779087	249	245	39	41	39	40	42
R-2917	Non-Participating	358127	4779401	243	239	37	39	37	38	39
R-2919	Non-Participating	366525	4780301	227	223	42	43	41	42	44
R-2932	Non-Participating	347151	4787073	246	242	41	43	41	42	44
R-2936	Non-Participating	353443	4790094	254	250	40	42	39	41	42
R-2937	Non-Participating	352473	4788224	248	244	42	44	42	43	45
R-2938	Non-Participating	351994	4785625	254	250	41	43	41	42	44
R-2940	Non-Participating	353027	4785480	249	245	40	42	39	41	42
R-2954	Non-Participating	366662	4785232	229	225	42	44	42	43	45
R-2955	Non-Participating	348297	4783224	253	249	48	50	47	48	50
R-2957	Non-Participating	352156	4778901	244	240	37	39	37	39	40
R-2958	Non-Participating	356040	4783365	243	239	39	41	39	40	42
R-2962	Non-Participating	365741	4782443	233	229	48	49	47	48	50
R-2964	Non-Participating	366976	4780858	225	221	41	43	40	42	43
R-2974	Participating	351890	4786786	247	243	49	51	48	49	51
R-2975	Non-Participating	353246	4785317	249	245	39	41	39	40	42
R-2983	Non-Participating	359907	4785762	234	230	46	47	46	47	48
R-2985	Participating	365071	4786700	229	225	50	52	49	51	52

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2989	Non-Participating	348410	4783224	253	249	46	48	46	47	49
R-2990	Non-Participating	350492	4779208	244	240	40	42	40	41	42
R-2991	Non-Participating	351080	4779976	248	244	46	48	45	46	48
R-2994	Non-Participating	356079	4779767	244	240	44	46	44	45	47
R-2996	Participating	361977	4782545	234	230	44	46	43	45	46
R-2997	Non-Participating	366471	4780538	227	223	43	45	43	44	46
R-2998	Non-Participating	367098	4781857	228	224	41	42	40	41	43
R-3011	Non-Participating	350949	4788501	244	240	43	45	42	44	45
R-3012	Non-Participating	350637	4784888	254	250	40	42	39	41	42
R-3021	Non-Participating	355969	4791082	239	235	36	38	36	37	38
R-3024	Non-Participating	364515	4789604	233	229	48	50	47	49	50
R-3025	Non-Participating	366603	4785229	229	225	42	44	42	43	45
R-3026	Non-Participating	347149	4783763	247	243	43	45	43	44	46
R-3027	Non-Participating	346937	4779852	249	245	39	40	38	39	41
R-3028	Non-Participating	348827	4781636	249	245	47	49	46	48	49
R-3029	Non-Participating	352979	4780820	249	245	41	43	41	42	44
R-3032	Participating	366003	4783513	230	226	49	51	48	49	51
R-3043	Non-Participating	349457	4787400	244	240	44	45	43	44	46
R-3044	Non-Participating	353386	4787461	245	241	46	48	45	47	48
R-3045	Non-Participating	354270	4786406	244	240	40	42	39	41	42
R-3063	Non-Participating	367612	4786727	229	225	39	41	39	40	41
R-3064	Non-Participating	367509	4786968	229	225	39	41	39	40	42
R-3065	Non-Participating	348634	4784374	249	245	42	43	41	42	44
R-3066	Non-Participating	348573	4783184	255	251	45	46	44	45	47
R-3067	Non-Participating	353441	4783344	263	259	42	44	42	43	44
R-3068	Participating	351502	4782154	259	255	47	49	46	48	49
R-3069	Non-Participating	348753	4779213	251	247	41	43	40	42	43
R-3070	Non-Participating	356171	4781764	246	242	46	48	45	46	48
R-3073	Non-Participating	364238	4783564	229	225	46	48	45	47	48
R-3075	Participating	364423	4781034	232	228	43	45	43	44	45
R-3076	Non-Participating	365108	4782145	229	225	47	48	46	47	49
R-3077	Non-Participating	366852	4781879	229	225	42	44	41	43	44
R-3078	Non-Participating	366934	4782067	229	225	41	43	41	42	44
R-3089	Non-Participating	347057	4784755	244	240	41	43	41	42	44
R-3092	Non-Participating	352489	4789569	249	245	39	41	39	40	42
R-3093	Non-Participating	350318	4785307	254	250	41	42	40	42	43
R-3107	Non-Participating	350398	4783286	259	255	45	47	44	46	47
R-3108	Non-Participating	347339	4782595	252	248	42	44	41	43	44
R-3109	Participating	351266	4780062	253	249	48	50	47	48	50
R-3112	Non-Participating	357996	4779408	242	238	37	39	37	38	40
R-3113	Non-Participating	362353	4783536	229	225	47	49	46	48	49
R-3114	Non-Participating	367204	4783670	230	226	40	42	40	41	43
R-3129	Non-Participating	347139	4787697	249	245	39	41	39	40	42
R-3131	Non-Participating	348172	4788053	245	241	41	43	40	42	43
R-3134	Non-Participating	352481	4790449	249	245	36	38	36	37	39
R-3136	Participating	348919	4787009	244	240	45	47	44	46	47
R-3153	Non-Participating	363630	4788655	234	230	48	50	47	48	50
R-3154	Non-Participating	348456	4783108	254	250	45	47	45	46	48
R-3155	Non-Participating	351885	4779964	258	254	44	46	44	45	47
R-3157	Non-Participating	359528	4783376	234	230	42	44	42	43	44
R-3159	Non-Participating	358223	4779417	242	238	37	38	36	38	39
R-3161	Non-Participating	363114	4782176	232	228	46	48	46	47	49
R-3170	Non-Participating	348623	4788524	244	240	40	42	40	41	43
R-3175	Non-Participating	352545	4790496	249	245	36	38	36	37	39
R-3177	Non-Participating	351283	4786343	249	245	48	49	47	48	50
R-3178	Participating	352533	4786608	247	243	47	49	46	47	49
R-3189	Non-Participating	367172	4786704	224	220	41	43	40	42	43
R-3190	Non-Participating	366988	4786756	224	220	42	44	41	43	44
R-3192	Non-Participating	348757	4783320	254	250	43	45	43	44	46
R-3193	Participating	350452	4780766	249	245	49	51	48	50	51

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3197	Non-Participating	364343	4780392	232	228	40	42	40	41	43
R-3219	Non-Participating	346988	4784753	244	240	41	43	41	42	43
R-3220	Non-Participating	349999	4790693	239	235	37	38	36	38	39
R-3221	Non-Participating	347439	4788286	247	243	38	40	38	39	40
R-3224	Non-Participating	354204	4789733	239	235	42	44	42	43	45
R-3225	Non-Participating	349470	4786528	248	244	43	45	43	44	45
R-3226	Non-Participating	348092	4785241	246	242	48	50	47	48	50
R-3227	Non-Participating	354234	4786065	244	240	39	41	39	40	42
R-3228	Non-Participating	353554	4785084	248	244	38	40	38	40	41
R-3245	Non-Participating	363015	4784727	230	226	47	49	47	48	50
R-3247	Non-Participating	364638	4784819	229	225	48	50	47	49	50
R-3249	Non-Participating	348471	4783029	254	250	45	47	44	45	47
R-3252	Non-Participating	358346	4780522	239	235	39	40	38	40	41
R-3253	Non-Participating	364718	4781961	229	225	46	48	46	47	49
R-3254	Non-Participating	366422	4781896	229	225	45	47	44	45	47
R-3256	Non-Participating	367153	4780400	225	221	38	40	38	39	41
R-3271	Non-Participating	350221	4788727	244	240	47	49	46	48	49
R-3275	Non-Participating	352545	4790440	249	245	36	38	36	37	39
R-3276	Non-Participating	352858	4785575	249	245	40	42	40	41	43
R-3292	Non-Participating	363009	4785131	230	226	48	50	47	49	50
R-3293	Non-Participating	348759	4783093	258	254	43	45	43	44	46
R-3295	Non-Participating	348550	4783224	254	250	45	47	44	46	47
R-3296	Non-Participating	349204	4783248	259	255	42	44	42	43	44
R-3297	Non-Participating	353568	4783744	252	248	40	42	40	41	43
R-3298	Non-Participating	349582	4779216	254	250	41	42	40	41	43
R-3299	Non-Participating	351615	4779766	249	245	44	46	43	44	46
R-3303	Non-Participating	359911	4782071	234	230	47	49	46	48	49
R-3304	Non-Participating	362015	4782710	233	229	44	46	44	45	47
R-3305	Non-Participating	364440	4781157	232	228	44	45	43	44	46
R-3307	Non-Participating	366648	4781882	229	225	43	45	43	44	46
R-3308	Participating	366348	4780774	227	223	46	48	45	46	48
R-3320	Non-Participating	349355	4788331	244	240	44	45	43	44	46
R-3323	Non-Participating	352397	4786421	249	245	45	47	44	46	47
R-3340	Participating	358801	4786490	246	242	43	43	42	43	44
R-3345	Non-Participating	348531	4783228	254	250	45	47	44	46	47
R-3346	Non-Participating	348747	4783264	257	253	43	45	43	44	46
R-3347	Participating	353669	4780902	249	245	43	45	43	44	45
R-3348	Participating	353636	4781297	252	248	44	46	44	45	47
R-3350	Non-Participating	360873	4782425	233	229	46	48	46	47	48
R-3351	Participating	364972	4783092	229	225	47	49	47	48	50
R-3355	Non-Participating	366631	4780291	227	223	41	43	40	42	43
R-3368	Non-Participating	349559	4788604	240	236	47	49	46	48	49
R-3370	Non-Participating	353527	4785239	246	242	39	40	38	40	41
R-3382	Non-Participating	363019	4789943	234	230	41	43	40	42	43
R-3383	Non-Participating	365830	4789694	229	225	46	47	45	46	48
R-3384	Non-Participating	366353	4784626	230	226	44	46	44	45	47
R-3385	Non-Participating	346608	4781676	254	250	38	39	37	39	40
R-3386	Non-Participating	348726	4781190	249	245	49	51	48	49	51
R-3387	Non-Participating	351442	4783188	259	255	44	45	43	44	46
R-3388	Non-Participating	353510	4783398	264	260	42	44	41	43	44
R-3392	Non-Participating	358435	4783413	237	233	39	41	39	40	42
R-3394	Non-Participating	357867	4780045	239	235	40	41	39	40	42
R-3396	Non-Participating	365602	4780271	229	225	45	47	44	45	47
R-3397	Non-Participating	366466	4780281	227	223	42	44	41	43	44
R-3398	Non-Participating	365887	4780390	229	225	46	48	45	46	48
R-3414	Non-Participating	346797	4786442	245	241	40	42	40	41	43
R-3415	Non-Participating	350305	4789164	244	240	47	49	47	48	50
R-3417	Non-Participating	352588	4790532	248	244	36	38	36	37	39
R-3418	Non-Participating	353374	4790132	251	247	39	41	39	40	42
R-3419	Non-Participating	350229	4785414	259	255	41	43	40	42	43

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3420	Non-Participating	350967	4787536	245	241	50	52	50	51	53
R-3431	Non-Participating	357821	4788253	239	235	39	40	39	40	41
R-3433	Non-Participating	359662	4789340	239	235	38	40	38	39	41
R-3441	Participating	354519	4780851	249	245	48	50	47	48	50
R-3442	Non-Participating	358410	4783411	236	232	39	41	39	40	42
R-3444	Non-Participating	358373	4782000	236	232	41	43	41	42	44
R-3448	Participating	365153	4783555	229	225	48	50	47	49	50
R-3457	Participating	349420	4788018	244	240	43	45	42	44	45
R-3461	Participating	353413	4789386	254	250	46	48	46	47	49
R-3463	Non-Participating	353720	4785266	244	240	38	40	38	40	41
R-3479	Non-Participating	354458	4786397	244	240	39	41	39	40	42
R-3480	Non-Participating	362903	4788776	234	230	44	46	44	45	46
R-3481	Non-Participating	363016	4789375	234	230	43	45	42	44	45
R-3482	Non-Participating	366135	4789223	229	225	45	47	45	46	47
R-3483	Non-Participating	367261	4788130	229	225	40	42	40	41	43
R-3484	Non-Participating	366360	4784359	231	227	45	47	44	46	47
R-3487	Non-Participating	352720	4779967	245	241	40	42	40	41	43
R-3488	Non-Participating	359054	4783484	236	232	41	43	40	42	43
R-3489	Non-Participating	355148	4779684	249	245	42	44	41	43	44
R-3490	Participating	365311	4780351	229	225	44	46	44	45	47
R-3505	Non-Participating	352582	4790493	249	245	36	38	36	37	39
R-3518	Non-Participating	363032	4790033	234	230	40	42	40	41	43
R-3520	Non-Participating	367037	4789768	229	225	39	40	38	40	41
R-3521	Non-Participating	363622	4786744	234	230	49	51	48	49	51
R-3522	Non-Participating	366348	4785930	227	223	44	46	43	45	46
R-3524	Non-Participating	348707	4782899	259	255	43	45	43	44	45
R-3525	Non-Participating	348454	4783183	254	250	46	48	45	46	48
R-3526	Non-Participating	348807	4783184	257	253	43	45	43	44	45
R-3527	Participating	348972	4783146	254	250	42	44	42	43	45
R-3528	Participating	354048	4781717	253	249	49	51	48	49	51
R-3530	Non-Participating	355808	4780033	244	240	46	48	45	47	48
R-3531	Non-Participating	362364	4783338	230	226	46	48	45	46	48
R-3533	Non-Participating	366347	4781397	228	224	47	49	46	47	49
R-3545	Non-Participating	351902	4786667	247	243	48	50	47	48	50
R-3546	Non-Participating	351931	4785653	258	254	41	43	41	42	44
R-3564	Non-Participating	348412	4783157	254	250	46	48	45	47	48
R-3565	Non-Participating	348870	4779319	250	246	41	43	41	42	44
R-3566	Non-Participating	353658	4780026	249	245	40	42	40	41	43
R-3569	Non-Participating	358350	4783316	235	231	39	41	39	40	42
R-3572	Non-Participating	364772	4780072	230	226	40	42	40	41	43
R-3576	Non-Participating	350152	4788583	244	240	46	48	46	47	49
R-3578	Participating	353343	4788518	248	244	47	49	46	48	49
R-3593	Non-Participating	365579	4789780	230	226	47	49	46	48	49
R-3594	Non-Participating	348692	4783265	256	252	44	46	43	44	46
R-3595	Non-Participating	350183	4783533	256	252	42	44	42	43	45
R-3596	Non-Participating	351712	4781591	257	253	45	47	45	46	47
R-3597	Non-Participating	355150	4781651	249	245	51	53	51	52	53
R-3600	Non-Participating	364856	4783341	229	225	47	49	46	47	49
R-3612	Non-Participating	350573	4789559	243	239	42	44	42	43	45
R-3615	Non-Participating	352545	4790531	248	244	36	38	36	37	39
R-3618	Non-Participating	348584	4785317	244	240	43	45	43	44	46
R-3619	Non-Participating	354305	4786328	244	240	39	41	39	40	42
R-3631	Non-Participating	355030	4789497	239	235	46	47	45	46	48
R-3634	Participating	359785	4785449	234	230	44	46	44	45	46
R-3635	Non-Participating	347328	4784072	247	243	43	45	43	44	46
R-3639	Participating	357124	4781787	241	237	42	44	41	43	44
R-3641	Participating	365442	4781968	229	225	49	51	48	49	51
R-3642	Non-Participating	364129	4780153	232	228	39	41	39	40	41
R-3661	Non-Participating	357299	4790155	239	235	37	39	37	38	40
R-3664	Non-Participating	366677	4786718	224	220	43	45	43	44	46

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3666	Non-Participating	347339	4783650	249	245	46	48	45	47	48
R-3668	Non-Participating	357320	4781918	239	235	41	43	40	42	43
R-3670	Non-Participating	356548	4781549	244	240	46	47	45	46	48
R-3672	Non-Participating	364473	4783409	229	225	46	48	45	47	48
R-3673	Non-Participating	366541	4781888	229	225	44	46	43	45	46
R-3687	Non-Participating	353440	4788131	245	241	44	46	44	45	47
R-3688	Non-Participating	352294	4786245	249	245	44	46	43	45	46
R-3691	Non-Participating	353451	4785092	249	245	38	40	38	40	41
R-3701	Non-Participating	359804	4788813	238	234	41	42	40	41	43
R-3702	Participating	363210	4790584	234	230	39	41	39	40	41
R-3703	Participating	364636	4788612	232	228	49	51	48	50	51
R-3706	Non-Participating	367297	4786559	224	220	40	42	40	41	43
R-3708	Non-Participating	348610	4782829	258	254	43	45	43	44	46
R-3709	Non-Participating	348444	4783225	253	249	46	48	45	47	48
R-3710	Non-Participating	350383	4783024	256	252	48	50	47	48	50
R-3711	Non-Participating	353960	4783341	252	248	44	45	43	44	46
R-3713	Participating	360836	4783396	234	230	48	50	48	49	51
R-3714	Non-Participating	363251	4783939	229	225	46	48	45	47	48
R-3715	Non-Participating	364728	4782477	229	225	47	49	46	48	49
R-3716	Non-Participating	364837	4782519	229	225	47	49	46	47	49
R-3736	Participating	351147	4789414	247	243	40	42	39	41	42
R-3737	Participating	350722	4786538	249	245	52	54	51	52	54
R-3738	Non-Participating	350344	4785058	251	247	40	42	40	41	43
R-3754	Non-Participating	366631	4789139	229	225	42	44	41	43	44
R-3756	Participating	349202	4783177	258	254	42	44	42	43	45
R-3757	Non-Participating	351697	4783177	259	255	42	44	42	43	45
R-3758	Non-Participating	347327	4779194	250	246	38	40	37	39	40
R-3759	Non-Participating	354817	4783252	249	245	43	45	43	44	45
R-3760	Non-Participating	357176	4781800	240	236	42	43	41	43	44
R-3761	Non-Participating	365113	4782876	234	230	48	50	48	49	51
R-3762	Participating	365324	4781954	229	225	48	50	48	49	51
R-3763	Non-Participating	365719	4780003	229	225	42	44	41	43	44
R-3771	Non-Participating	347127	4788445	248	244	36	38	36	37	39
R-3772	Non-Participating	352494	4790413	249	245	36	38	36	37	39
R-3774	Participating	353437	4788616	247	243	50	52	49	50	52
R-3775	Non-Participating	353837	4788146	244	240	44	46	44	45	47
R-3776	Participating	349462	4787255	244	240	44	46	43	44	46
R-3777	Non-Participating	348750	4784493	249	245	41	43	41	42	44
R-3778	Non-Participating	348912	4784867	248	244	41	43	41	42	43
R-3780	Participating	352735	4785053	256	252	39	41	39	40	42
R-3793	Non-Participating	357298	4789847	240	236	38	40	38	39	41
R-3794	Non-Participating	361352	4786538	234	230	47	49	47	48	49
R-3795	Non-Participating	364508	4789545	233	229	49	51	48	49	51
R-3796	Non-Participating	366207	4791038	229	225	37	39	37	38	40
R-3797	Non-Participating	366359	4784432	231	227	45	47	44	46	47
R-3798	Non-Participating	353232	4783327	259	255	41	43	41	42	44
R-3801	Non-Participating	355294	4779314	249	245	40	42	40	41	43
R-3802	Non-Participating	366435	4783948	229	225	45	47	44	46	47
R-3803	Non-Participating	366346	4779584	227	223	38	40	38	39	40
R-3829	Non-Participating	354749	4786627	243	239	39	40	38	40	41
R-3832	Non-Participating	348414	4782959	254	250	45	47	44	45	47
R-3833	Participating	349682	4783244	259	255	42	44	42	43	45
R-3834	Non-Participating	351648	4783189	259	255	43	44	42	43	45
R-3835	Non-Participating	355109	4783080	249	245	43	45	43	44	46
R-3837	Non-Participating	355807	4781774	249	245	47	49	47	48	49
R-3838	Non-Participating	359887	4782771	234	230	45	47	45	46	48
R-3839	Non-Participating	356000	4780040	244	240	47	49	46	47	49
R-3840	Non-Participating	357351	4780036	239	235	43	45	42	43	45
R-3841	Participating	361543	4783888	234	230	48	50	48	49	51
R-3854	Non-Participating	350341	4790791	244	240	36	38	36	37	38

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3855	Non-Participating	350248	4787995	244	240	46	48	45	46	48
R-3860	Non-Participating	353299	4789708	256	252	42	44	42	43	45
R-3861	Non-Participating	350164	4787881	244	240	46	48	45	47	48
R-3862	Participating	350680	4786496	249	245	51	53	50	51	53
R-3863	Non-Participating	352271	4786327	249	245	44	46	44	45	47
R-3864	Participating	351889	4786875	246	242	49	51	48	50	51
R-3865	Non-Participating	351967	4785206	254	250	40	42	40	41	42
R-3877	Non-Participating	356432	4788129	239	235	45	47	44	45	47
R-3878	Non-Participating	366121	4789140	229	225	46	47	45	46	48
R-3879	Participating	364798	4785319	229	225	51	53	51	52	53
R-3880	Non-Participating	350267	4783075	257	253	46	48	45	47	48
R-3881	Participating	353524	4782493	254	250	47	49	46	48	49
R-3882	Non-Participating	348858	4779716	249	245	44	46	44	45	47
R-3883	Non-Participating	351877	4779985	258	254	45	47	44	45	47
R-3884	Participating	354750	4780769	249	245	48	50	47	49	50
R-3885	Non-Participating	356864	4781572	244	240	44	46	43	45	46
R-3886	Non-Participating	366462	4781575	229	225	45	47	45	46	47
R-3887	Non-Participating	366000	4780222	229	225	44	45	43	44	46
R-3914	Non-Participating	347232	4783508	249	245	45	47	44	46	47
R-3915	Non-Participating	350882	4783867	254	250	41	43	41	42	44
R-3916	Non-Participating	351565	4783288	259	255	42	44	42	43	45
R-3919	Non-Participating	366478	4780011	226	222	40	42	40	41	42
R-3932	Participating	354477	4788080	244	240	42	44	42	43	45
R-3937	Non-Participating	367008	4789834	229	225	38	40	38	40	41
R-3938	Non-Participating	348633	4783227	257	253	44	46	44	45	46
R-3940	Non-Participating	350493	4778795	244	240	38	40	38	39	41
R-3941	Non-Participating	353538	4779853	249	245	39	41	39	40	42
R-3942	Non-Participating	356721	4781619	244	240	44	46	44	45	47
R-3945	Non-Participating	366345	4779913	226	222	40	42	39	41	42
R-3958	Non-Participating	353443	4787863	244	240	44	46	43	44	46
R-3959	Non-Participating	348774	4784472	249	245	41	43	41	42	44
R-3972	Participating	362966	4787548	234	230	49	51	48	49	51
R-3973	Non-Participating	366238	4785438	229	225	44	46	44	45	47
R-3975	Non-Participating	350103	4784143	254	250	40	42	40	41	43
R-3976	Non-Participating	356894	4779899	239	235	45	47	44	46	47
R-3977	Non-Participating	367242	4783516	229	225	40	42	40	41	43
R-3979	Non-Participating	366496	4780201	227	223	41	43	41	42	43
R-3991	Non-Participating	348580	4789986	242	238	37	39	37	38	40
R-3993	Non-Participating	352349	4790211	249	245	37	39	37	38	39
R-3994	Non-Participating	348743	4784522	249	245	41	43	41	42	44
R-3995	Non-Participating	353523	4785674	245	241	40	42	39	41	42
R-4008	Non-Participating	355061	4790069	239	235	42	43	41	42	44
R-4009	Participating	362616	4789124	235	231	42	44	42	43	44
R-4010	Non-Participating	366189	4788191	229	225	46	48	45	47	48
R-4015	Non-Participating	366432	4784207	231	227	45	47	44	46	47
R-4016	Participating	350298	4782652	254	250	50	52	49	50	52
R-4017	Non-Participating	350293	4782880	254	250	48	50	47	49	50
R-4018	Non-Participating	351990	4782929	259	255	42	44	42	43	44
R-4019	Non-Participating	353745	4783220	254	250	44	46	43	45	46
R-4021	Non-Participating	351815	4781588	254	250	45	46	44	45	47
R-4023	Non-Participating	359415	4781771	234	230	48	50	47	48	50
R-4024	Non-Participating	356944	4779013	240	236	38	40	38	39	41
R-4026	Non-Participating	366709	4783611	229	225	43	45	42	44	45
R-4044	Non-Participating	352203	4785753	251	247	42	43	41	42	44
R-4050	Non-Participating	365456	4791241	231	227	37	39	37	38	40
R-4054	Non-Participating	361405	4789604	238	234	39	41	39	40	42
R-4058	Non-Participating	348839	4782822	254	250	43	45	42	44	45
R-4059	Non-Participating	348379	4783013	254	250	45	47	45	46	48
R-4060	Non-Participating	350260	4783823	254	250	41	43	41	42	44
R-4061	Non-Participating	353095	4783476	259	255	40	42	40	41	43

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4062	Non-Participating	353584	4783575	255	251	41	43	41	42	44
R-4065	Non-Participating	363356	4782231	232	228	49	51	48	49	51
R-4080	Participating	353831	4789492	246	242	46	48	45	46	48
R-4081	Non-Participating	352584	4786381	249	245	45	47	45	46	47
R-4082	Non-Participating	351934	4786502	248	244	46	48	46	47	49
R-4099	Non-Participating	362886	4788041	234	230	47	49	46	48	49
R-4100	Non-Participating	348702	4782875	259	255	43	45	43	44	45
R-4101	Participating	350193	4783979	254	250	41	42	40	42	43
R-4102	Non-Participating	350404	4783168	259	255	46	48	45	47	48
R-4103	Non-Participating	348692	4782353	251	247	43	45	43	44	46
R-4106	Non-Participating	347442	4779928	249	245	42	44	41	43	44
R-4108	Non-Participating	357392	4781693	239	235	41	43	41	42	44
R-4122	Non-Participating	352484	4790426	249	245	36	38	36	37	39
R-4125	Non-Participating	354164	4789666	239	235	43	45	42	44	45
R-4126	Non-Participating	350135	4787687	244	240	47	49	46	48	49
R-4127	Non-Participating	353469	4787176	247	243	48	50	47	48	50
R-4137	Non-Participating	365717	4786785	229	225	49	51	49	50	51
R-4138	Participating	365325	4786700	229	225	50	52	49	50	52
R-4139	Non-Participating	366392	4785936	228	224	44	46	43	45	46
R-4140	Non-Participating	366545	4786332	224	220	43	45	43	44	46
R-4141	Non-Participating	348697	4783183	259	255	44	46	43	44	46
R-4142	Non-Participating	353479	4783316	261	257	42	44	42	43	45
R-4143	Participating	350787	4781575	254	250	50	52	50	51	53
R-4144	Non-Participating	352028	4781157	253	249	44	46	44	45	47
R-4145	Non-Participating	347596	4779918	249	245	43	45	42	44	45
R-4146	Non-Participating	348903	4779531	249	245	43	45	42	44	45
R-4148	Non-Participating	358195	4780093	239	235	38	40	38	39	41
R-4149	Non-Participating	357928	4779265	244	240	37	39	37	38	39
R-4151	Non-Participating	363084	4783577	229	225	46	47	45	46	48
R-4152	Non-Participating	366391	4783657	229	225	45	47	45	46	48
R-4164	Non-Participating	349337	4788265	244	240	43	45	43	44	46
R-4165	Non-Participating	350052	4788400	244	240	45	47	45	46	48
R-4166	Non-Participating	352655	4790349	249	245	37	39	37	38	39
R-4167	Non-Participating	349517	4785152	249	245	40	42	40	41	43
R-4168	Non-Participating	351886	4787125	244	240	49	51	48	50	51
R-4169	Non-Participating	352552	4786539	248	244	46	48	46	47	49
R-4173	Non-Participating	360833	4788203	234	230	49	51	48	50	51
R-4176	Non-Participating	366197	4790833	229	225	38	40	38	39	40
R-4179	Non-Participating	366254	4785223	226	222	44	46	43	45	46
R-4181	Participating	349650	4783250	259	255	42	44	42	43	45
R-4182	Non-Participating	352656	4783432	262	258	40	42	40	41	43
R-4183	Non-Participating	351395	4781607	259	255	47	49	47	48	50
R-4184	Non-Participating	354066	4780917	250	246	45	47	45	46	48
R-4187	Non-Participating	354367	4783447	250	246	43	45	42	44	45
R-4189	Non-Participating	356067	4781780	248	244	46	48	45	47	48
R-4190	Non-Participating	358294	4783410	236	232	39	41	39	40	42
R-4191	Non-Participating	358276	4782901	237	233	40	42	40	41	43
R-4192	Non-Participating	358286	4781708	238	234	41	42	40	42	43
R-4193	Non-Participating	357182	4778718	241	237	37	38	36	38	39
R-4214	Non-Participating	353417	4790165	251	247	39	41	39	40	42
R-4222	Participating	359886	4786312	234	230	51	51	51	51	51
R-4223	Non-Participating	364316	4789858	234	230	46	48	45	46	48
R-4224	Non-Participating	361982	4788241	234	230	44	46	44	45	47
R-4227	Non-Participating	366363	4784302	231	227	45	47	45	46	47
R-4229	Non-Participating	352186	4782755	263	259	42	44	41	43	44
R-4232	Non-Participating	355556	4783359	244	240	41	42	40	41	43
R-4235	Non-Participating	366425	4781814	229	225	45	47	44	46	47
R-4237	Non-Participating	366309	4779679	227	223	39	40	38	40	41
R-4252	Non-Participating	349534	4785472	249	245	41	43	40	42	43
R-4253	Non-Participating	352795	4786431	249	245	47	49	46	47	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4254	Non-Participating	351936	4785284	254	250	40	42	40	41	43
R-4255	Non-Participating	351948	4785415	254	250	40	42	40	41	43
R-4270	Non-Participating	364594	4790513	234	230	41	43	41	42	44
R-4271	Non-Participating	348458	4782858	254	250	44	46	43	45	46
R-4272	Participating	348386	4783234	253	249	47	49	46	47	49
R-4273	Non-Participating	351610	4784272	254	250	39	41	39	40	42
R-4274	Non-Participating	351249	4783168	259	255	45	47	44	45	47
R-4275	Non-Participating	351926	4781133	250	246	45	47	45	46	47
R-4276	Non-Participating	350482	4779853	251	247	43	45	43	44	46
R-4277	Non-Participating	353590	4779854	249	245	39	41	39	40	42
R-4279	Non-Participating	358407	4781521	239	235	41	42	40	41	43
R-4280	Non-Participating	362127	4781909	234	230	41	43	41	42	44
R-4290	Non-Participating	353244	4790159	251	247	39	41	39	40	41
R-4291	Non-Participating	353723	4789608	252	248	44	46	44	45	47
R-4310	Non-Participating	366103	4790984	229	225	37	39	37	38	40
R-4326	Non-Participating	347252	4780612	249	245	42	44	42	43	45
R-4328	Non-Participating	348870	4783193	255	251	43	45	42	44	45
R-4330	Non-Participating	353550	4785812	245	241	40	42	40	41	43
R-4331	Participating	352721	4781404	249	245	42	44	41	43	44
R-4332	Participating	353560	4780727	249	245	42	44	42	43	44
R-4333	Non-Participating	352764	4780664	249	245	41	43	41	42	44
R-4334	Non-Participating	354928	4786809	243	239	39	40	38	40	41
R-4336	Non-Participating	356329	4788299	239	235	47	49	47	48	49
R-4339	Non-Participating	363145	4784796	230	226	48	50	47	49	50
R-4340	Non-Participating	362512	4781807	234	230	42	44	41	43	44
R-4341	Participating	363878	4788255	234	230	49	51	49	50	52
R-4342	Non-Participating	364753	4780654	231	227	43	45	43	44	46
R-4345	Non-Participating	364901	4783569	229	225	47	49	46	47	49
R-4346	Non-Participating	365385	4783483	232	228	50	52	49	50	52
R-4348	Non-Participating	367191	4788334	229	225	40	42	40	41	43
R-4351	Non-Participating	367235	4781879	227	223	40	42	39	41	42
R-4352	Non-Participating	366708	4780555	226	222	42	44	41	42	44
R-4500	Non-Participating	366862	4780756	226	222	41	43	41	42	44
R-4501	Non-Participating	367207	4781883	227	223	40	42	40	41	42
R-4502	Non-Participating	366455	4783860	229	225	45	47	44	46	47
R-4503	Non-Participating	365531	4791218	231	227	37	39	37	38	40
R-4504	Participating	364693	4788110	231	227	49	51	48	50	51
R-4505	Participating	364808	4784055	229	225	47	48	46	47	49
R-4507	Participating	360992	4783405	234	230	49	51	49	50	51
R-4508	Non-Participating	362868	4784713	231	227	47	49	47	48	49
R-4509	Non-Participating	363548	4786779	234	230	48	50	48	49	51
R-4510	Non-Participating	358375	4783472	237	233	39	41	39	40	42
R-4511	Non-Participating	353390	4783909	254	250	40	41	39	41	42
R-4513	Non-Participating	353413	4784355	249	245	39	40	38	40	41
R-4514	Non-Participating	353574	4784340	249	245	39	40	38	40	41
R-4515	Non-Participating	352640	4783310	259	255	40	42	40	41	43
R-4516	Non-Participating	350899	4784227	254	250	40	42	40	41	42
R-4517	Non-Participating	350401	4784369	254	250	40	42	40	41	42
R-4518	Non-Participating	350222	4784531	254	250	40	41	39	41	42
R-4519	Non-Participating	351757	4783333	259	255	42	43	41	42	44
R-4520	Non-Participating	348765	4783386	254	250	43	45	43	44	46
R-4521	Non-Participating	348310	4785152	244	240	45	47	44	45	47
R-4522	Non-Participating	350100	4786102	255	251	44	46	43	45	46
R-4523	Non-Participating	348698	4786281	249	245	45	47	44	45	47
R-4524	Non-Participating	348634	4788491	244	240	41	42	40	41	43
R-4526	Non-Participating	359461	4781552	238	234	44	46	44	45	47
R-4527	Non-Participating	356982	4781401	242	238	44	46	44	45	47
R-4528	Non-Participating	355148	4780474	249	245	47	49	47	48	50
R-4529	Participating	355010	4781976	249	245	51	53	51	52	54
R-4530	Non-Participating	354585	4783252	249	245	44	46	43	45	46

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4531	Participating	354219	4783223	252	248	45	47	44	45	47
R-4532	Non-Participating	352030	4782552	264	260	43	44	42	43	45
R-4533	Participating	353038	4781711	249	245	43	44	42	43	45
R-4534	Non-Participating	351923	4781314	250	246	44	46	44	45	47
R-4535	Non-Participating	352185	4780962	251	247	44	46	43	45	46
R-4536	Participating	348671	4780754	249	245	52	54	51	53	54
R-4537	Non-Participating	348791	4779251	250	246	41	43	41	42	43
R-4538	Non-Participating	347836	4779889	249	245	44	46	44	45	47
R-4539	Non-Participating	346915	4781086	251	247	39	41	39	40	42
R-4540	Non-Participating	347046	4783012	249	245	42	44	41	43	44
R-4541	Non-Participating	351532	4786364	249	245	47	49	46	48	49
R-4542	Non-Participating	352306	4785781	249	245	42	43	41	42	44
R-4543	Non-Participating	352961	4785363	249	245	39	41	39	41	42
R-4544	Non-Participating	351830	4785455	254	250	41	43	40	42	43
R-4545	Non-Participating	353664	4785934	244	240	40	42	40	41	43
R-4546	Non-Participating	353375	4785816	247	243	41	43	40	42	43
R-4547	Participating	354218	4785776	244	240	38	40	38	40	41
R-4548	Non-Participating	354534	4786431	244	240	39	41	39	40	41
R-4549	Non-Participating	354979	4787255	244	240	39	41	39	40	42
R-4550	Participating	355466	4788105	239	235	44	46	43	45	46
R-4551	Non-Participating	354116	4788074	244	240	43	45	43	44	45
R-4552	Non-Participating	352821	4788105	247	243	43	45	42	44	45
R-4553	Participating	353421	4789352	252	248	47	49	46	47	49
R-4554	Non-Participating	352559	4789484	252	248	40	42	39	41	42
R-4555	Non-Participating	352486	4789990	254	250	38	40	38	39	40
R-4556	Non-Participating	353413	4789913	256	252	41	43	40	42	43
R-4557	Non-Participating	353265	4789782	254	250	42	43	41	42	44
R-4558	Non-Participating	353519	4789583	251	247	44	46	44	45	47
R-4559	Non-Participating	353418	4789572	252	248	44	46	43	45	46
R-4560	Non-Participating	353379	4789573	254	250	44	46	43	45	46
R-4561	Non-Participating	350376	4785522	259	255	41	43	41	42	44
R-4562	Non-Participating	348832	4782756	254	250	43	45	42	44	45
R-4563	Non-Participating	348470	4782978	254	250	45	46	44	45	47
R-4564	Non-Participating	348799	4782927	256	252	43	45	42	44	45
R-4565	Non-Participating	358257	4783359	236	232	39	41	39	40	42
R-4566	Non-Participating	362595	4782635	234	230	44	46	44	45	47
R-4568	Participating	365751	4786675	229	225	49	50	48	49	51
R-4570	Non-Participating	358886	4786712	247	243	43	44	43	44	44
R-4571	Participating	358790	4786683	249	245	43	44	43	43	44
R-4572	Participating	358783	4786661	249	245	43	43	42	43	44
R-4573	Non-Participating	359102	4786621	240	236	45	46	45	45	46
R-4574	Non-Participating	359150	4787969	242	238	42	43	42	43	44
R-4575	Participating	363146	4787724	234	230	50	52	49	50	52
R-4576	Participating	364393	4784928	229	225	49	51	49	50	52
R-4577	Participating	364624	4786098	230	226	51	53	51	52	54
R-4580	Non-Participating	364340	4780371	232	228	40	42	40	41	43
R-4581	Non-Participating	364521	4781854	230	226	46	48	46	47	49
R-4585	Non-Participating	353672	4782929	256	252	46	48	45	47	48
R-4586	Non-Participating	348763	4783185	259	255	43	45	43	44	46
R-4587	Non-Participating	349723	4783170	259	255	43	45	42	44	45
R-4588	Non-Participating	351086	4780056	253	249	46	48	46	47	49
R-4589	Non-Participating	355128	4782691	249	245	45	47	45	46	48
R-4590	Non-Participating	355566	4783274	244	240	41	43	40	42	43
R-4594	Non-Participating	356315	4788216	239	235	46	48	46	47	48
R-4595	Non-Participating	350153	4787536	244	240	49	51	48	49	51
R-4596	Participating	351868	4787214	244	240	49	51	48	49	51
R-4597	Non-Participating	350925	4789453	244	240	41	42	40	41	43
R-4598	Non-Participating	355823	4787962	239	235	44	46	43	44	46
R-4599	Non-Participating	354994	4786750	242	238	38	40	38	40	41
R-4600	Participating	348298	4783242	253	249	48	50	47	49	50

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4601	Non-Participating	358437	4788240	246	242	39	40	39	40	41
R-4602	Non-Participating	358505	4788224	249	245	39	41	39	40	41
R-4603	Non-Participating	358571	4788236	249	245	39	41	39	40	41
R-4604	Non-Participating	358621	4788237	249	245	39	41	39	40	41
R-4605	Non-Participating	358326	4787367	249	245	40	41	40	41	42
R-4606	Non-Participating	358105	4787283	249	245	39	41	39	40	41
R-4607	Non-Participating	358107	4787226	247	243	39	41	39	40	41
R-4608	Non-Participating	358334	4787261	245	241	40	41	40	41	42
R-4609	Non-Participating	358106	4787392	249	245	39	41	39	40	41
R-4610	Non-Participating	358252	4787173	244	240	40	41	40	41	42
R-4611	Non-Participating	358102	4787144	244	240	39	41	39	40	41
R-4612	Participating	358467	4787025	244	240	41	42	41	41	42
R-4613	Participating	358182	4786809	244	240	40	41	40	40	41
R-4614	Non-Participating	358275	4786415	241	237	40	41	40	41	42
R-4615	Non-Participating	358291	4786396	241	237	40	41	40	41	42
R-4616	Non-Participating	357691	4786526	239	235	38	40	38	39	40
R-4617	Participating	357635	4786616	239	235	38	39	38	39	40
R-4618	Non-Participating	356811	4786656	239	235	37	39	37	38	40
R-4619	Non-Participating	356860	4786609	239	235	37	39	37	38	40
R-4620	Non-Participating	357076	4786598	239	235	37	39	37	38	40
R-4621	Participating	356981	4786528	239	235	37	39	37	38	40
R-4622	Non-Participating	354990	4786569	242	238	38	40	38	39	41
R-4623	Non-Participating	355103	4786406	241	237	38	40	38	39	40
R-4624	Non-Participating	355355	4786642	240	236	38	40	38	39	40
R-4625	Non-Participating	355609	4786587	240	236	37	39	37	39	40
R-4626	Non-Participating	355689	4786510	241	237	37	39	37	38	40
R-4627	Non-Participating	355888	4786580	240	236	37	39	37	38	40
R-4628	Non-Participating	355880	4786449	241	237	37	39	37	38	40
R-4629	Non-Participating	355987	4786477	241	237	37	39	37	38	40
R-4630	Participating	356291	4786578	240	236	37	39	37	38	40
R-4631	Non-Participating	356436	4786592	239	235	37	39	37	38	40
R-4632	Participating	356624	4785798	241	237	36	38	36	38	39
R-4633	Participating	356615	4785693	242	238	36	38	36	38	39
R-4634	Participating	356761	4785728	242	238	36	38	37	38	39
R-4635	Non-Participating	356243	4784991	244	240	36	38	36	38	39
R-4636	Non-Participating	355205	4785144	244	240	37	39	37	38	40
R-4637	Non-Participating	355109	4785413	244	240	37	39	37	38	40
R-4638	Non-Participating	355123	4785518	244	240	37	39	37	38	40
R-4639	Participating	355040	4785557	244	240	37	39	37	38	40
R-4640	Non-Participating	355144	4785845	244	240	37	39	37	38	40
R-4641	Non-Participating	354330	4785372	244	240	38	40	38	39	40
R-4642	Non-Participating	354381	4785158	244	240	38	39	37	39	40
R-4643	Non-Participating	354319	4784932	244	240	38	40	38	39	40
R-4644	Non-Participating	354314	4784882	244	240	38	40	38	39	40
R-4645	Non-Participating	358096	4788336	239	235	39	40	39	40	41
R-4646	Non-Participating	358201	4789659	239	235	37	38	37	38	39
R-4647	Non-Participating	358224	4788845	239	235	38	40	38	39	40
R-4648	Non-Participating	354377	4784777	244	240	38	40	38	39	40
R-4649	Non-Participating	354457	4784698	244	240	38	40	38	39	40
R-4650	Non-Participating	354578	4784794	244	240	38	39	38	39	40
R-4651	Non-Participating	354623	4784782	244	240	38	39	38	39	40
R-4652	Non-Participating	354673	4784767	244	240	38	39	37	39	40
R-4653	Participating	354901	4784658	244	240	38	39	38	39	40
R-4654	Non-Participating	354833	4784695	244	240	38	39	37	39	40
R-4655	Participating	355054	4784440	244	240	38	40	38	39	41
R-4656	Non-Participating	355307	4784434	244	240	38	39	38	39	40
R-4657	Non-Participating	355783	4784246	244	240	38	39	37	39	40
R-4658	Non-Participating	356388	4784092	243	239	37	39	37	39	40
R-4659	Non-Participating	356357	4784031	243	239	37	39	37	39	40
R-4660	Non-Participating	356678	4784516	244	240	37	38	37	38	39

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4661	Non-Participating	357093	4785014	244	240	37	38	37	38	39
R-4662	Non-Participating	357388	4785011	244	240	37	39	37	38	39
R-4663	Non-Participating	357493	4785007	244	240	37	39	37	38	39
R-4664	Non-Participating	357644	4785008	242	238	37	39	37	38	40
R-4665	Participating	357711	4785010	240	236	37	39	37	38	40
R-4666	Non-Participating	358217	4785223	239	235	38	40	38	39	41
R-4667	Non-Participating	358303	4785421	239	235	39	40	39	40	41
R-4668	Non-Participating	358294	4785475	239	235	39	40	39	40	41
R-4669	Non-Participating	358189	4785745	239	235	39	40	39	40	41
R-4670	Participating	351602	4784767	254	250	39	41	39	40	42
R-4671	Non-Participating	351672	4784792	254	250	39	41	39	40	42
R-4672	Non-Participating	351725	4784796	254	250	39	41	39	40	42
R-4673	Non-Participating	351851	4784707	254	250	39	41	39	40	42
R-4674	Non-Participating	351826	4784624	255	251	39	41	39	40	42
R-4675	Non-Participating	351840	4784931	254	250	39	41	39	40	42
R-4676	Non-Participating	351925	4784923	254	250	39	41	39	40	42
R-4677	Non-Participating	352117	4784904	259	255	39	41	39	40	42
R-4678	Non-Participating	352359	4784969	259	255	39	41	39	40	42
R-4679	Non-Participating	352443	4784805	259	255	39	41	39	40	41
R-4680	Non-Participating	352644	4784968	256	252	39	41	39	40	41
R-4681	Participating	352772	4784840	252	248	39	40	38	40	41
R-4682	Non-Participating	353025	4784937	250	246	39	40	38	40	41
R-4683	Non-Participating	352931	4784938	250	246	39	40	38	40	41
R-4684	Non-Participating	353435	4784945	249	245	38	40	38	39	41
R-4685	Non-Participating	353537	4784943	249	245	38	40	38	39	41
R-4686	Non-Participating	353468	4784862	250	246	38	40	38	39	41
R-4687	Non-Participating	353516	4784858	250	246	38	40	38	39	41
R-4688	Non-Participating	353463	4784803	251	247	38	40	38	39	41
R-4689	Non-Participating	353450	4784679	251	247	38	40	38	39	41
R-4690	Non-Participating	353554	4784624	249	245	38	40	38	39	41
R-4691	Non-Participating	353544	4784525	249	245	38	40	38	40	41
R-4692	Non-Participating	353584	4784411	249	245	38	40	38	40	41
R-4693	Non-Participating	353715	4783806	249	245	40	42	40	41	43
R-4694	Non-Participating	361269	4788300	234	230	47	48	46	47	49
R-4695	Non-Participating	356440	4783420	239	235	39	40	38	40	41
R-4696	Non-Participating	356395	4783243	240	236	39	41	39	40	42
R-4697	Non-Participating	356694	4783453	239	235	38	40	38	39	41
R-4698	Non-Participating	356671	4783530	239	235	38	40	38	39	41
R-4699	Non-Participating	356631	4783665	240	236	38	40	38	39	40
R-4700	Non-Participating	356858	4783277	239	235	38	40	38	40	41
R-4701	Non-Participating	357072	4783408	239	235	38	40	38	39	41
R-4702	Non-Participating	357155	4783407	239	235	38	40	38	39	41
R-4703	Non-Participating	357205	4783327	239	235	38	40	38	39	41
R-4704	Non-Participating	357265	4783310	239	235	38	40	38	39	41
R-4705	Non-Participating	357277	4783409	239	235	38	40	38	39	40
R-4706	Non-Participating	357350	4783171	239	235	38	40	38	39	41
R-4707	Non-Participating	357415	4783315	239	235	38	40	38	39	41
R-4708	Non-Participating	357472	4783265	239	235	38	40	38	39	41
R-4709	Non-Participating	353193	4784809	252	248	38	40	38	40	41
R-4710	Non-Participating	352082	4784786	256	252	39	41	39	40	42
R-4711	Participating	363311	4781156	234	230	41	43	41	42	44
R-4712	Non-Participating	362978	4780635	234	230	39	40	38	40	41
R-4713	Non-Participating	363064	4780582	234	230	38	40	38	40	41
R-4714	Non-Participating	363016	4780338	234	230	38	39	37	39	40
R-4715	Non-Participating	362945	4780202	234	230	37	39	37	38	40
R-4716	Non-Participating	363501	4780227	234	230	38	40	38	39	41
R-4717	Non-Participating	363630	4780240	234	230	38	40	38	39	41
R-4718	Non-Participating	357233	4783801	242	238	37	39	37	39	40
R-4719	Non-Participating	357133	4783694	241	237	37	39	37	39	40
R-4720	Non-Participating	356795	4783228	240	236	39	40	38	40	41

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4721	Non-Participating	358787	4788229	249	245	40	41	40	41	42
R-4722	Non-Participating	358477	4788071	249	245	39	41	39	40	41
R-4723	Non-Participating	358742	4788165	249	245	40	41	40	41	42
R-4724	Non-Participating	358818	4788165	248	244	40	41	40	41	42
R-4725	Non-Participating	363725	4780223	234	230	38	40	38	39	41
R-4726	Non-Participating	363729	4779964	234	230	37	39	37	39	40
R-4727	Non-Participating	353839	4785111	244	240	38	40	38	39	41
R-4728	Non-Participating	353905	4784965	245	241	38	40	38	39	41
R-4729	Non-Participating	358688	4785835	238	234	41	42	41	41	42
R-4730	Participating	356934	4783284	239	235	38	40	38	39	41
R-4731	Participating	358390	4782938	236	232	40	42	40	41	43
R-4732	Non-Participating	356708	4783299	240	236	39	40	38	40	41
R-4733	Non-Participating	357811	4783267	238	234	38	40	38	40	41
R-4734	Non-Participating	356990	4784200	242	238	37	39	37	38	40
R-4735	Non-Participating	347312	4784545	244	240	42	44	41	43	44
R-4736	Non-Participating	347714	4779863	249	245	43	45	43	44	46
R-4737	Non-Participating	350352	4784397	254	250	40	42	39	41	42
R-4738	Non-Participating	353435	4784507	249	245	38	40	38	40	41
R-4739	Non-Participating	357478	4783855	241	237	37	39	37	39	40
R-4740	Non-Participating	358200	4784195	239	235	38	40	38	39	41
R-4741	Non-Participating	358325	4783401	236	232	39	41	39	40	42
R-4742	Non-Participating	361589	4783408	234	230	47	49	47	48	50
R-4743	Non-Participating	366432	4785340	229	225	43	45	43	44	46
R-4744	Non-Participating	354496	4783380	249	245	43	45	43	44	45
R-4745	Non-Participating	353552	4785166	247	243	38	40	38	40	41
R-4746	Non-Participating	353536	4785349	246	242	39	41	39	40	41
R-4747	Non-Participating	353641	4786100	244	240	41	43	41	42	44
R-4748	Non-Participating	347222	4783480	249	245	45	47	44	46	47
R-4749	Non-Participating	351973	4785031	254	250	39	41	39	40	42
R-4750	Non-Participating	353038	4784738	253	249	38	40	38	40	41

APPENDIX C

Noise Level Contour Figures

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

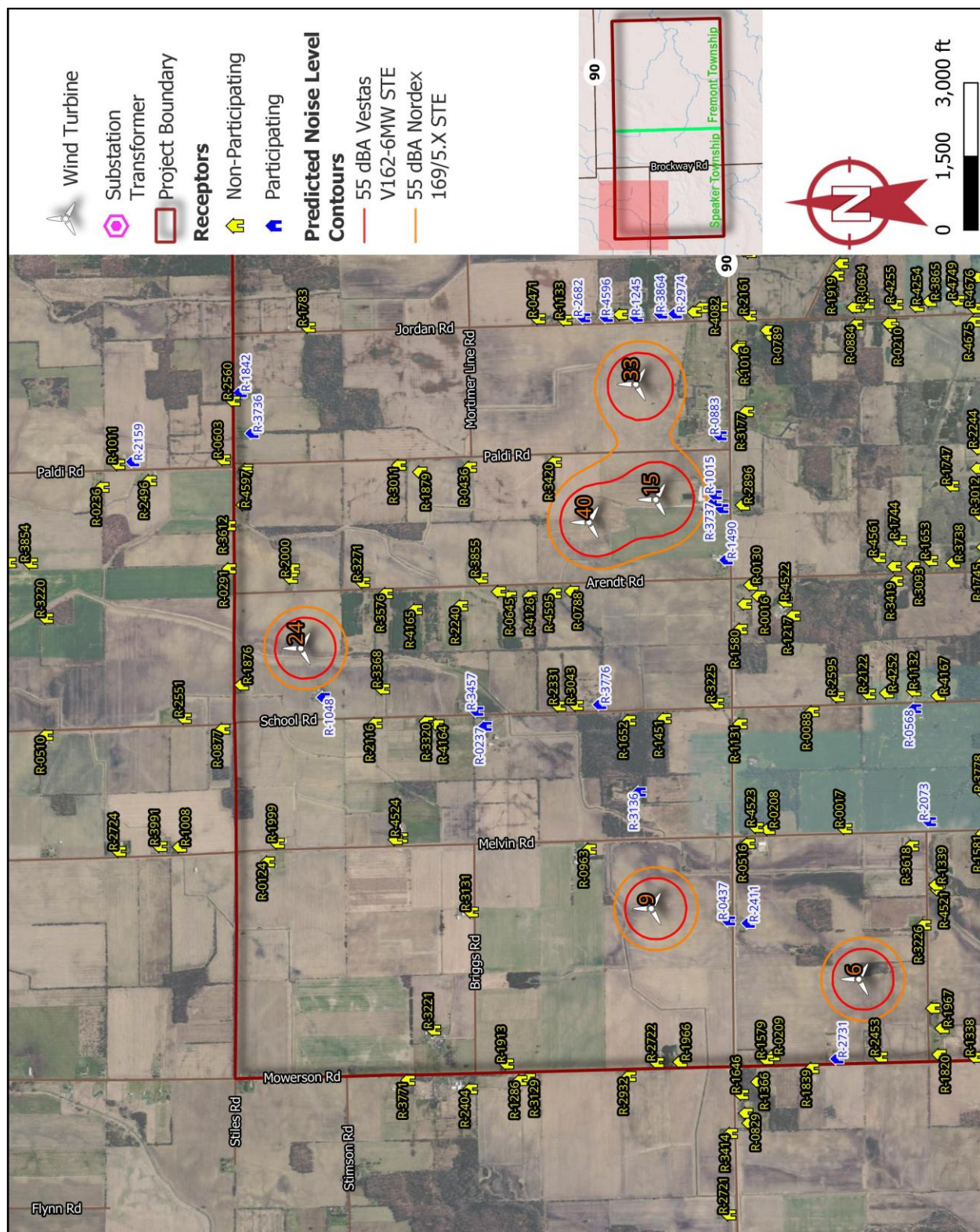


Figure C-1. Predicted Noise Level Contours – Northwest Portion

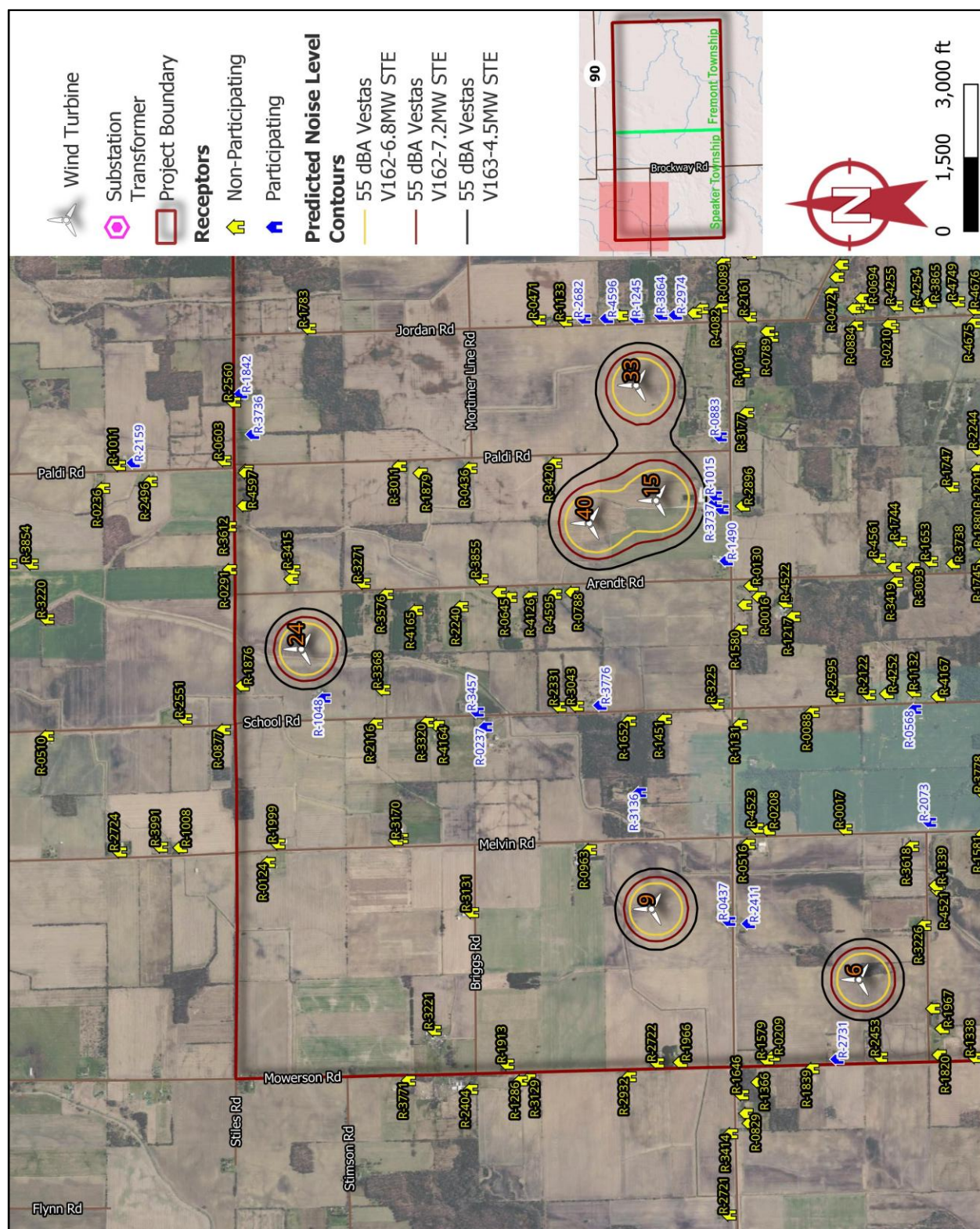


Figure C-1. Predicted Noise Level Contours – Northwest Portion (Cont.)







Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

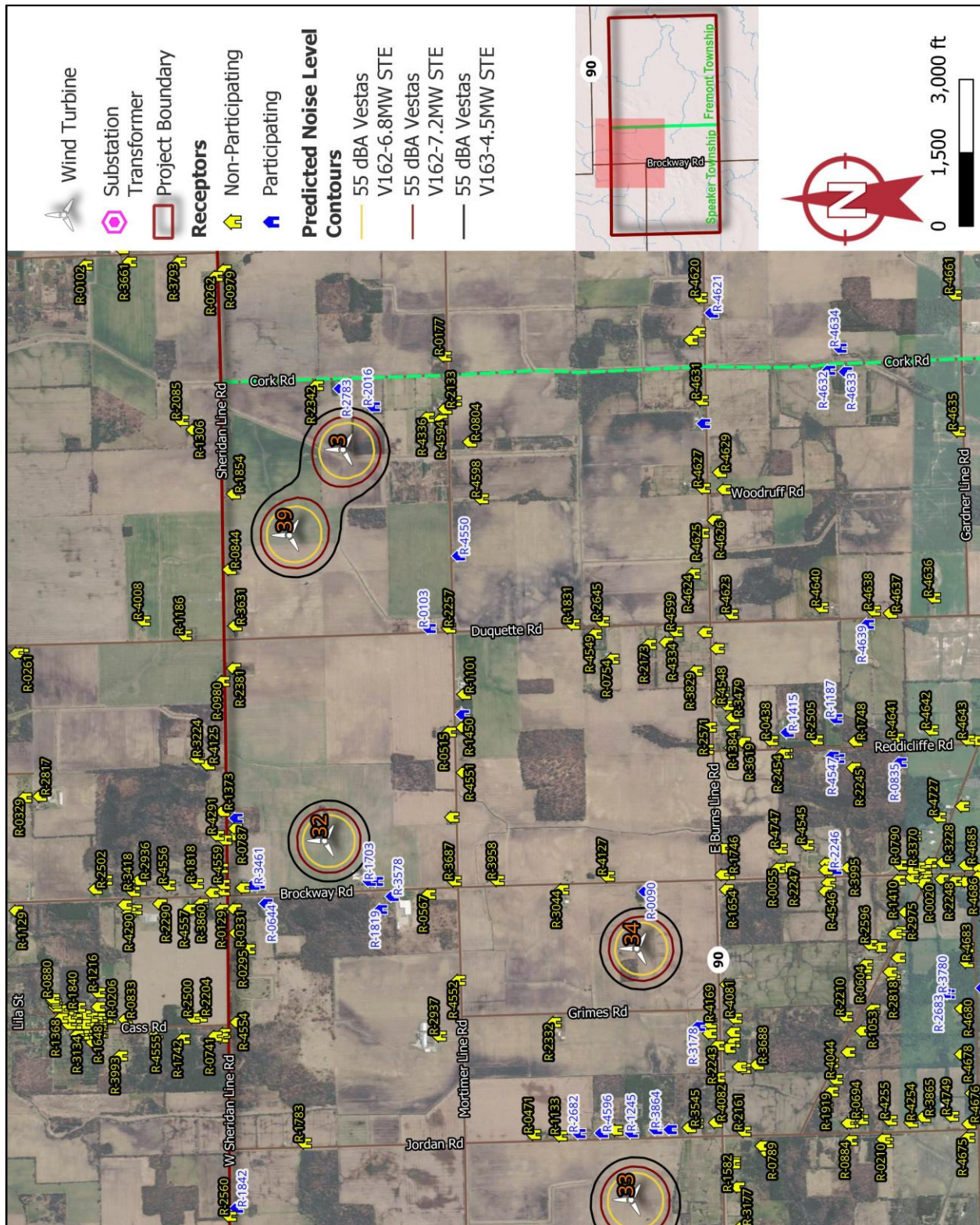


Figure C-3. Predicted Noise Level Contours – North Portion (Cont.)

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

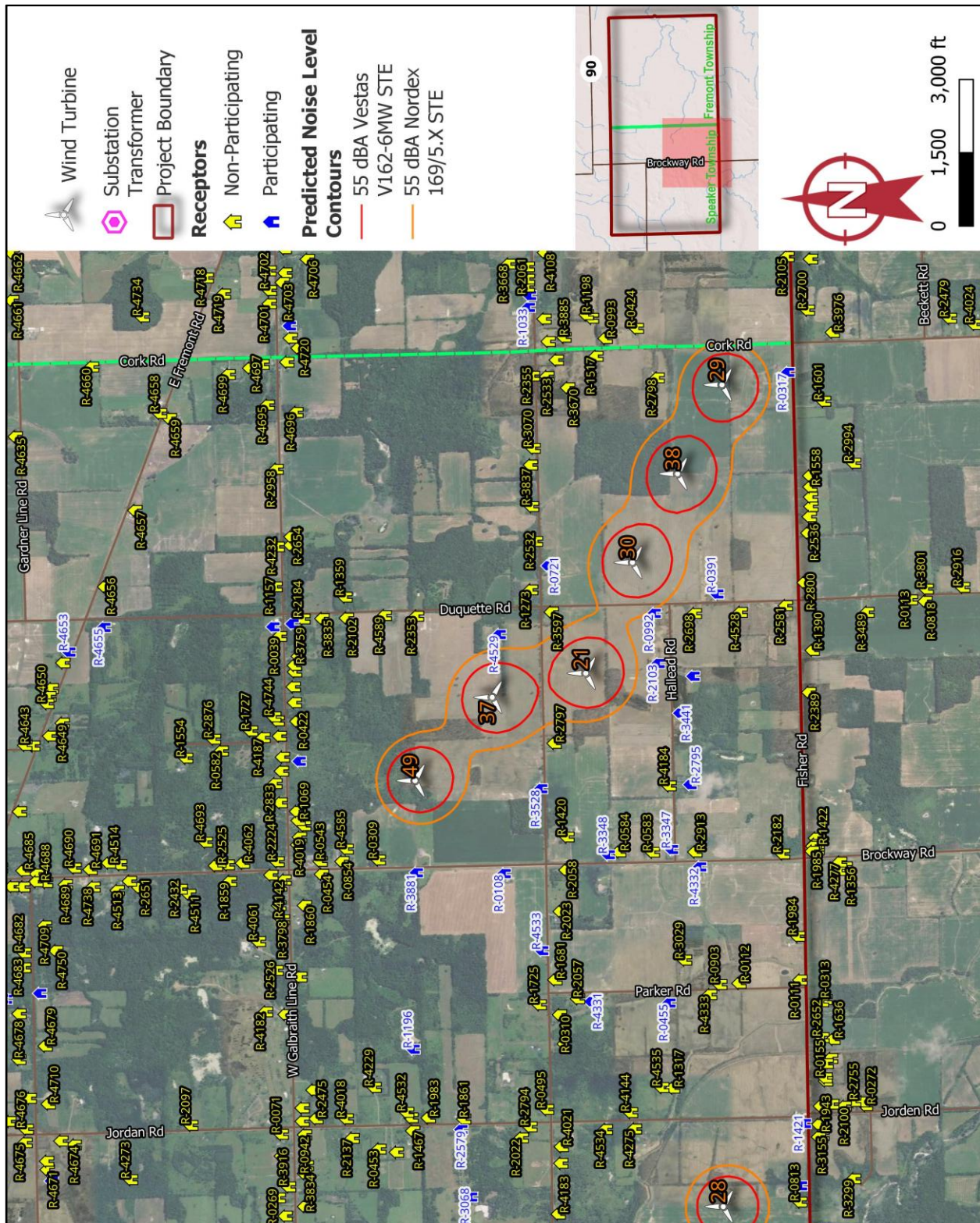


Figure C-4. Predicted Noise Level Contours – South Portion



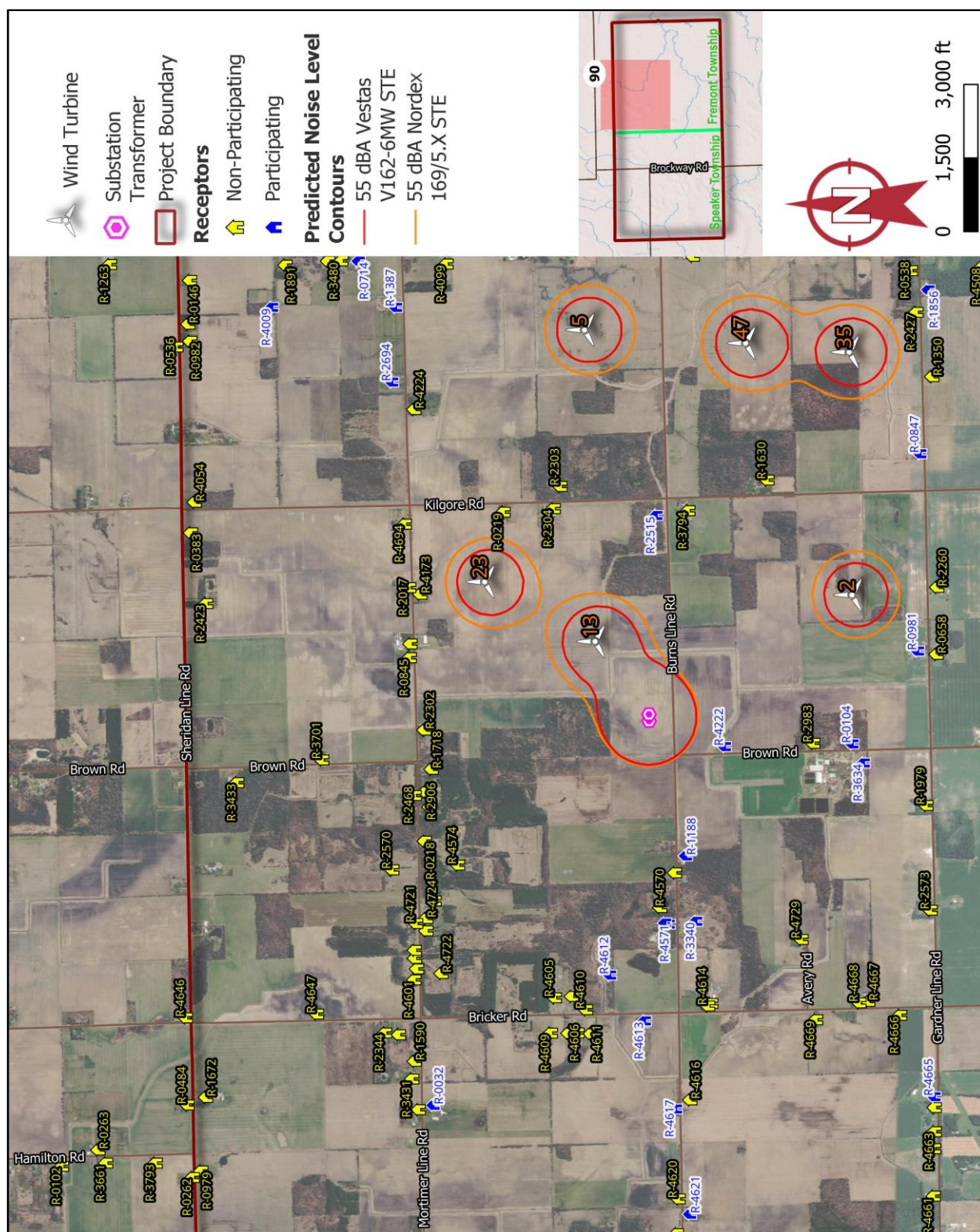


Figure C-5. Predicted Noise Level Contours – North-Central Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

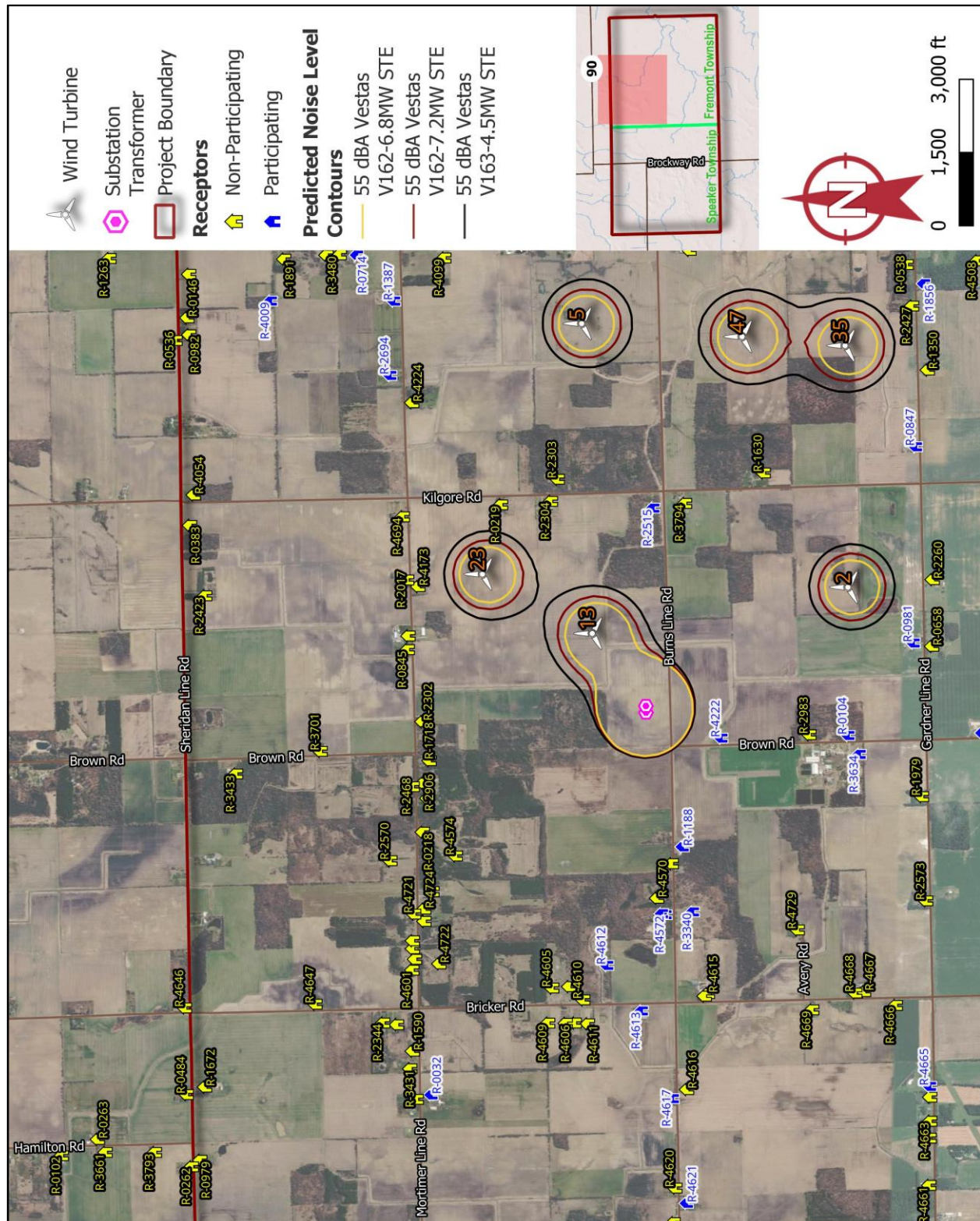


Figure C-5. Predicted Noise Level Contours – North-Central Portion (Cont.)

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

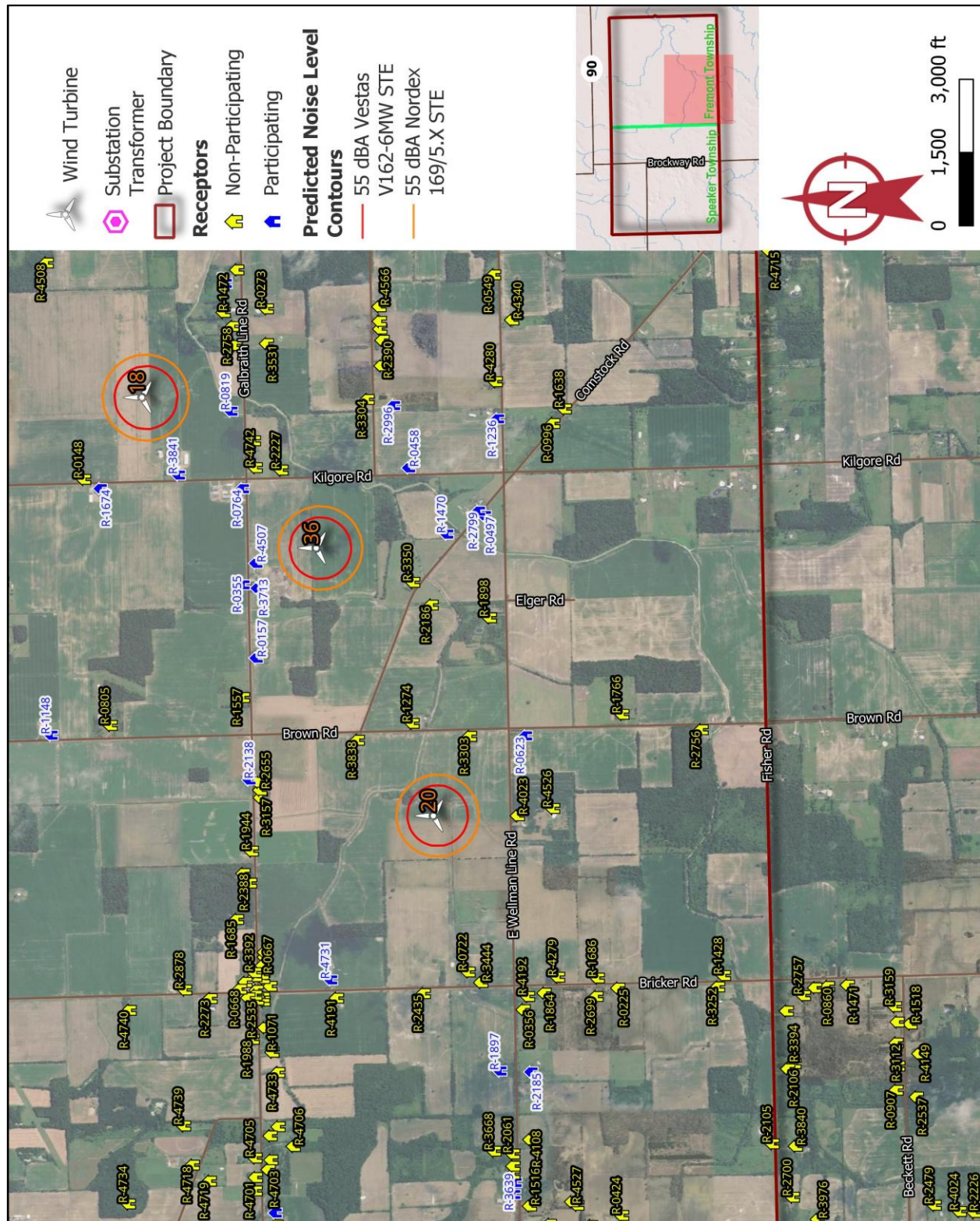


Figure C-6. Predicted Noise Level Contours – South-Central Portion



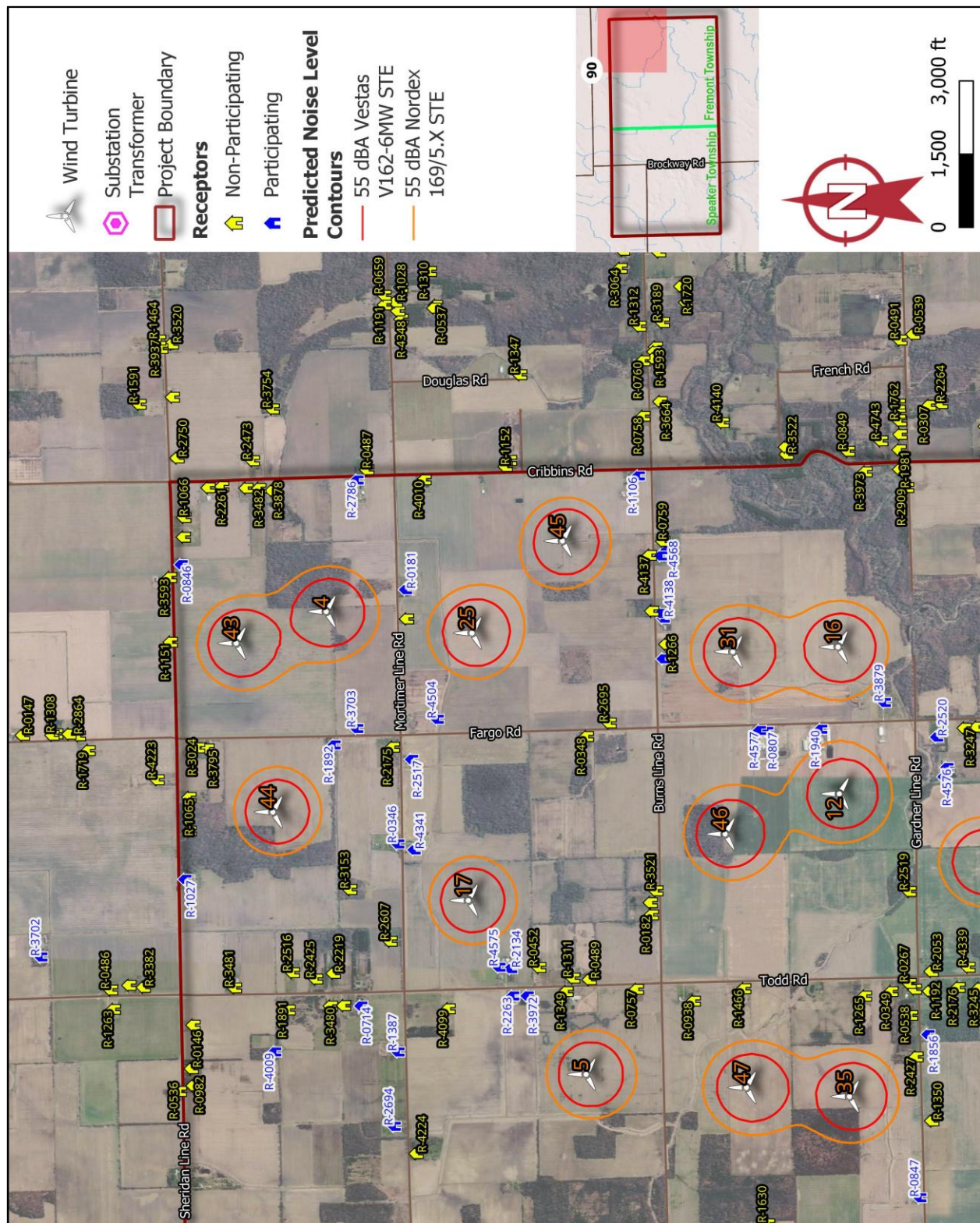


Figure C-7. Predicted Noise Level Contours – Northeast Portion

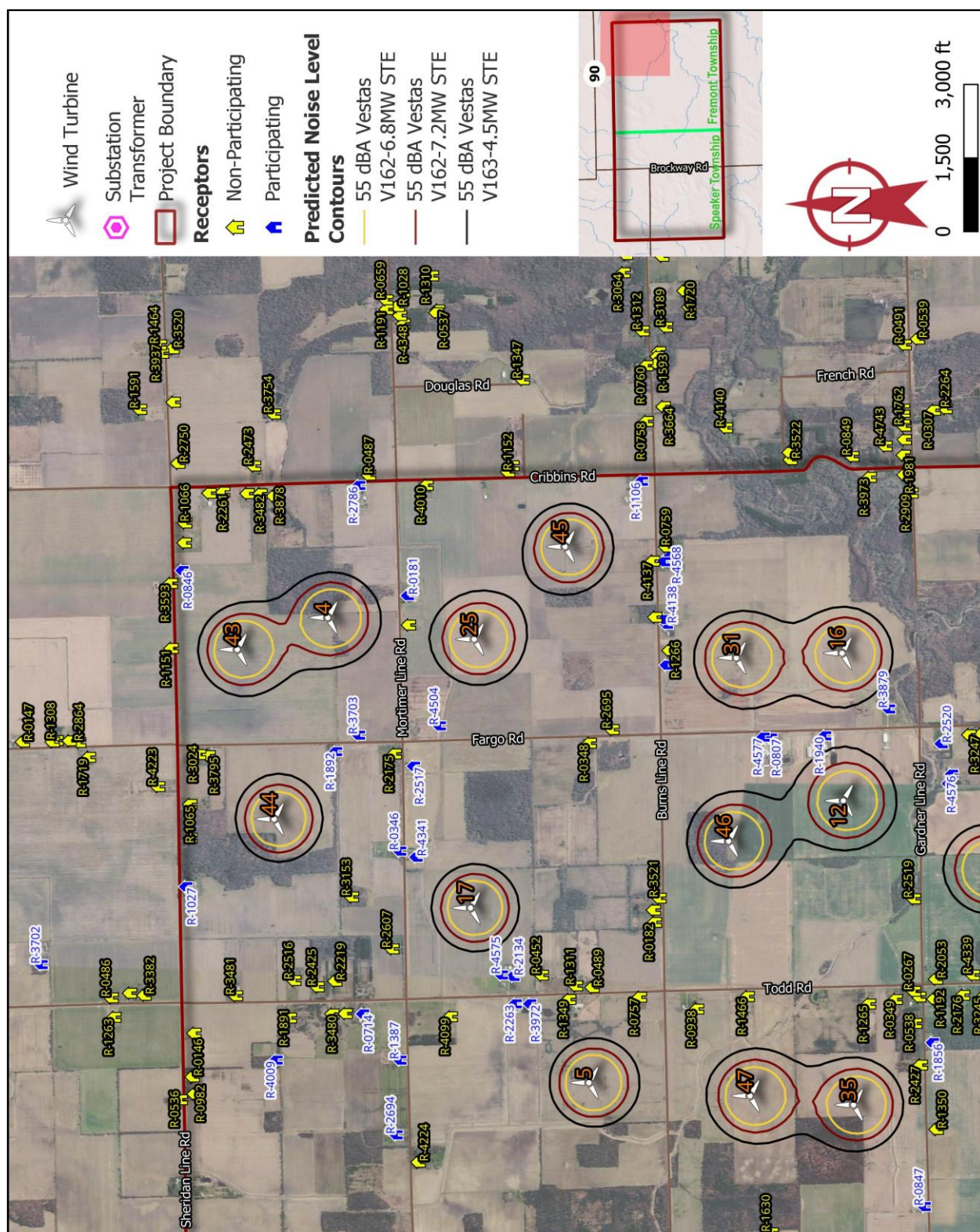


Figure C-7. Predicted Noise Level Contours – Northeast Portion (Cont.)

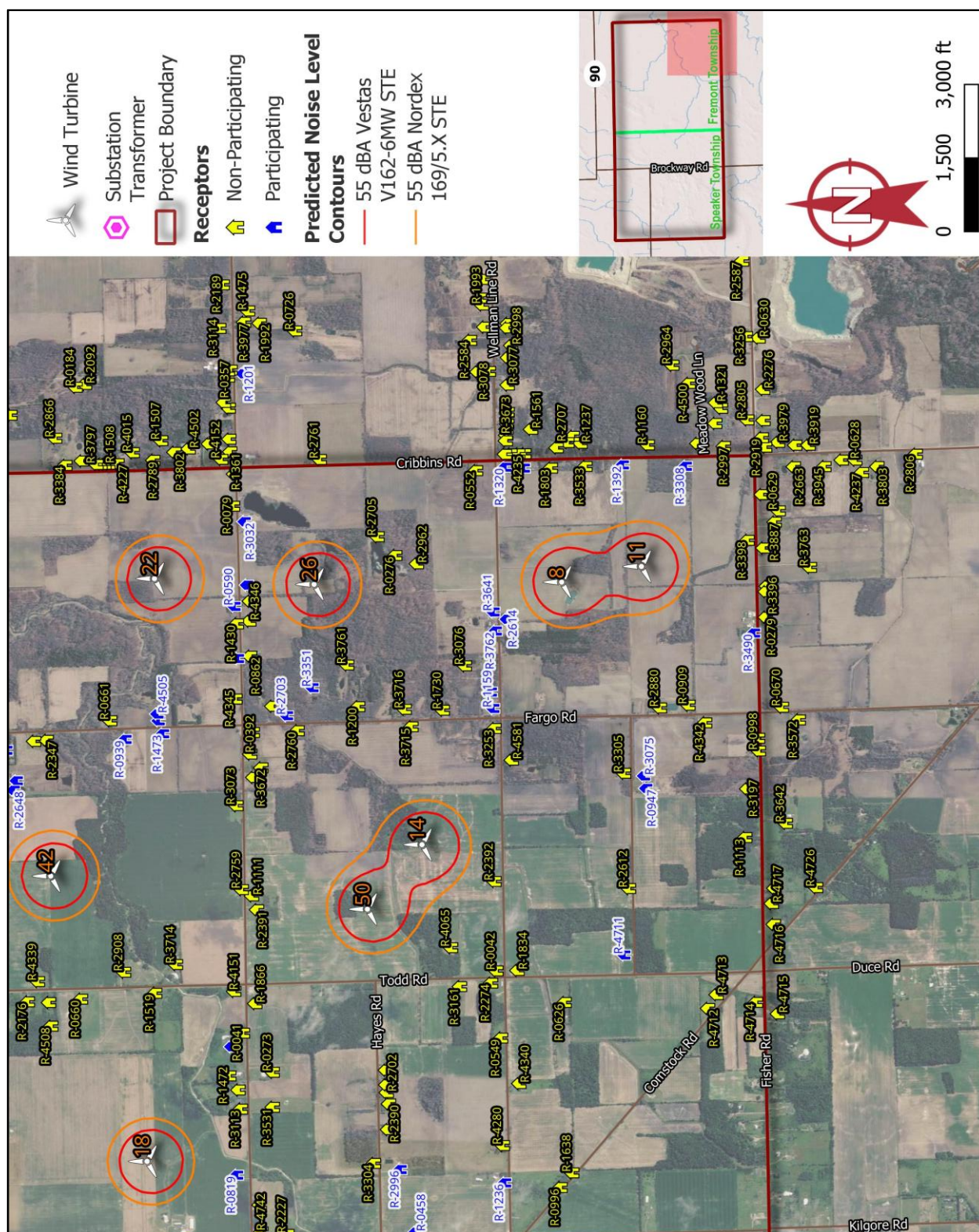


Figure C-8. Predicted Noise Level Contours – Southeast Portion



APPENDIX D

Ambient Noise Level Survey

D1. Ambient Noise Measurement Procedures

A background (ambient) noise level survey was conducted in the Project Area to characterize and document pre-construction noise levels. The survey was conducted between June 25 and July 16, 2024. The measurement survey was carried out in conformance with the requirements of a protocol mutually agreed to between Riverbend Wind and the acoustic consultant hired by Speaker Township. The measurement procedures and methodologies employed are consistent with MPSC requirements.

D1.1 Measurement Locations

In general, the Project study area is rural/agricultural with a relatively low density of residences. Significant roads in the area include Galbraith Line Road, which runs east to west through the central portion of the Project, State Highway 90, which runs east to west through central and northern portions of the Project, and State Highway 19, which runs north to south bisecting the Project. Other than traffic and natural sounds (birds, insects, wind), existing sources of noise include occasional agricultural operations, aircraft overhead, and the activities of residents (e.g., lawn mowing).

Noise levels were measured at six locations representative of the non-participating noise-sensitive receptors located closest to the Project. Noise measurement locations are shown in Figure D-1 and general coordinates are provided in Table D-1. Detailed maps and photographs of each measurement location are provided at the end of this appendix. The selection of the measurement locations considered several factors, including proximity to the proposed Project turbines, proximity to existing noise sources and roadways, farm and non-farm settings and their local activities and noise sources, and access to land and equipment security. The measurement points were selected to be representative of rural non-participating residences, both close to and removed from existing sources of noise, which would be most impacted by the Project.

Also, a factor in the site selection was to achieve a relatively even geographical distribution of measurement locations across the Project area. A description of the locations is as follows:

- Fremont 1 (F1) is in the east-central portion of Fremont Township, along Fargo Road, between the intersections with Gardner Line Road and Burns Line Road.
- Fremont 2 (F2) is in the northeast portion of Fremont Township, along Mortimer Line Road, between the intersections with Fargo Road and Cribbins Road.
- Fremont 3 (F3) is located in the southwestern portion of Fremont Township, along Bricker Road, between the intersections with Galbraith Line Road and Wellman Line Road.
- Speaker 1 (S1) is located in the southeast portion of Speaker Township, along Duquette Road, near the intersection with Wellman Line Road.
- Speaker 2 (S2) is approximately centrally located in Speaker Township, along Jordan Road, near the intersection with State Highway 90.
- Speaker 3 (S3) is located near the northeastern boundary of Speaker Township, along Cork Road, between the intersections with Sheridan Line Road and Mortimer Line Road.

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

Table D-1. Ambient Noise Measurement Locations

Measurement Location	Easting (UTM 17)	Northing (UTM 17)
F1	365202	4783555
F2	365562	4788372
F3	358400	4782931
S1	355144	4781549
S2	351882	4786921
S3	350255	4782171

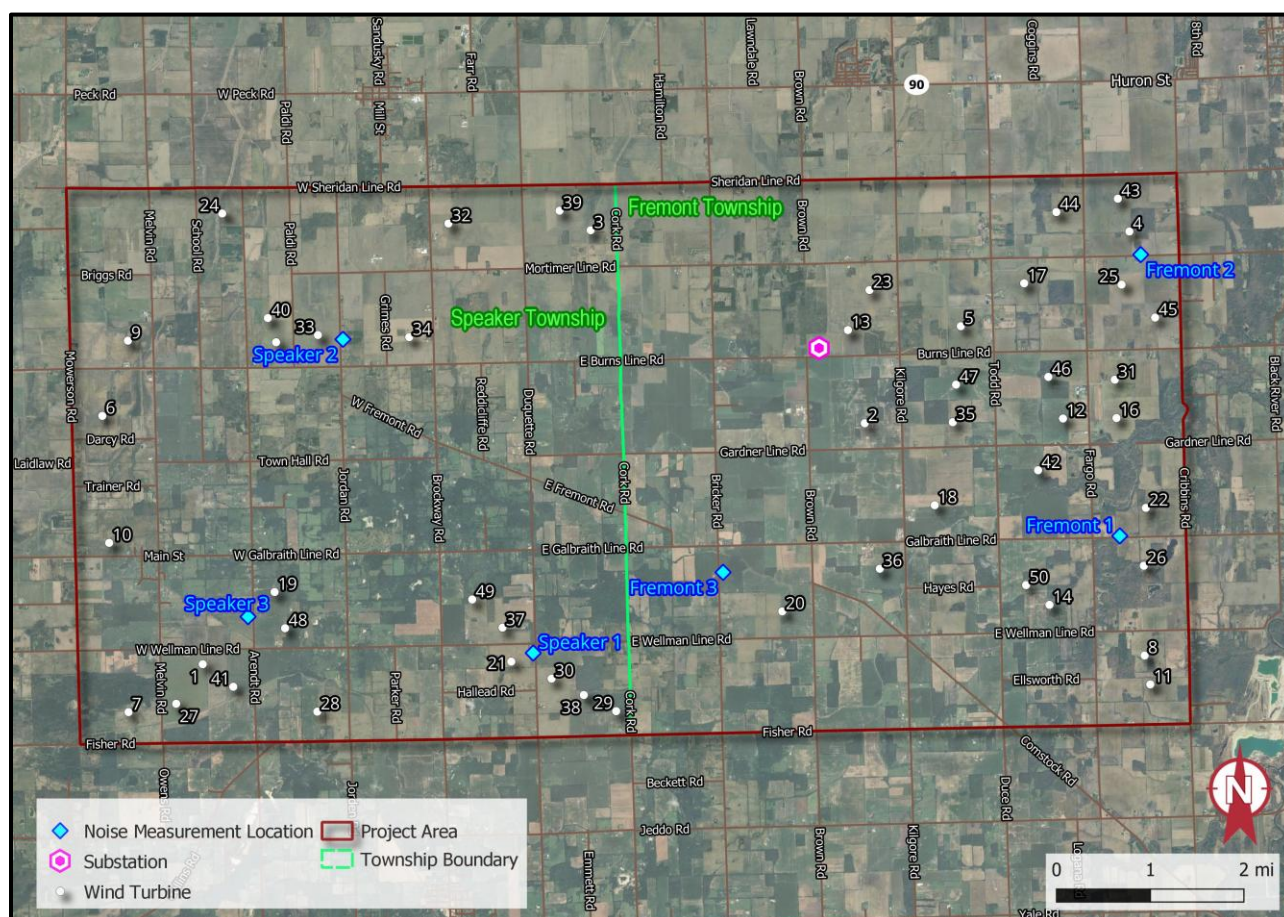


Figure D-1. Location of Project and Noise Measurement Locations

D1.2 Measurement Procedures

The long-term noise monitors continually measured ambient sound levels over the course of 20 days. For the most part, the measurement equipment was left to continuously measure noise and wind data unattended. Hankard Environmental staff made observations during daytime and nighttime hours for each visit to the Project area, noting environmental noise sources at each measurement location. These included equipment installation (June 25-26), and retrieval (July 15-16). Additionally, the Project supplied Hankard Environmental with wind speed data measured at a height of 60 meters from the Project's local meteorological tower. This data was used to

estimate when existing turbines would have been operational during the long-term measurements.

Sound levels were measured using Larson Davis models 831 meters that meet the provisions for Type 1 meters per ANSI S1.4. All sound level meters were calibrated on location prior to the measurements using a handheld calibrator and were calibrated by an accredited laboratory within 18 months of use.

The microphones were covered with hydrophobically treated, seven-inch diameter, 80 pores-per-inch density windscreens to reduce the influence of wind-induced noise. The microphones were mounted on a fixed post or tripod and positioned five feet above the ground and, with the exception of measurement location S3, at least 25 feet away from acoustically reflective surfaces per ANSI S12.9 Part 3. Due to land access, measurement location S3 was closer than 25 feet away from acoustically reflective surfaces. Wind speeds were measured continuously at the long-term monitoring sites using a Vaisala sonic anemometer.

The sound level meters were configured to collect the following data in 10-minute intervals:

- a. Unweighted octave band and one-third octave band noise levels (16 through 10,000 Hz).
- b. Overall A-weighted noise levels in the following metrics: L_{eq} , L_{10} , L_{50} , and L_{90} .

Table D-2. Noise and Meteorological Measurement Equipment

Instrument Type	Manufacturer	Model
Sound Level Meter	Larson Davis	831
Sound Level Meter	Larson Davis	831C
Preamplifier	Larson Davis	PRM831
½" Microphone	Larson Davis	377B02
Windscreen	ACO Pacific	WS7-80T
Acoustic Calibrator	Larson Davis	CAL200
Wind Data	Vaisala	WXT532
Meteorological and Wind Data	Vaisala	WXT536
External Audio Recordings	Tascam	DR-05X

D1.3 Analysis Procedures

The 10-second measurement data was used to calculate one-hour statistical noise level metrics. Ten-second samples with precipitation were removed from the analysis. The results are primarily presented herein in terms of four metrics: the A-weighted L_{eq} which represents the average sound level over a given measurement interval (one hour for this analysis), the A-weighted L_{10} which represents the level exceeded 10% the measurement interval and is influenced by high-level extraneous noises such as wind gusts and local traffic, the A-weighted L_{50} which represents the level exceeded 50% of the time, and the A-weighted L_{90} which represents the level exceeded 90% of the time over the measurement interval. The L_{90} filters out sporadic noises to some degree and is representative of the quiet, consistent levels occurring within the interval.

D1.4 Ambient Noise Levels Versus Wind Speed

A unique feature of wind turbine projects, versus other industrial noise sources, is that they only operate when it is windy at the height of the rotor. When this occurs there is almost always some degree of wind at tree- and ground-level, which generates noise as it passes through vegetation (trees, shrubs, crops, etc.) The noise from vegetation rustle can, at times, mask the noise from the wind turbines. The level of noise created by the wind is a function of the wind speed and the presence of, and type of, nearby vegetation (particularly trees). In the Project area there are many residences located near or within large stands of trees.

To assess how much noise is generated by the wind the measured ambient noise levels were plotted versus the concurrently measured on-site hub-height wind speed on an hourly basis. Wind speed at hub height was calculated by first determining the one-hour wind shear exponents using ground wind speeds measured at each measurement location and wind speeds measured by the Project's meteorological towers at a height of 60 meters above the ground. This wind shear exponent along with the meteorological tower data, was then used to extrapolate the wind speeds at hub height using the power law vertical extrapolation method.

D2. Measurement Analysis Results

D2.1 Overall Measurement Analysis Results

Sources of existing noise commonly observed in the area were natural sounds such as birds calling, wind noise, and rustling vegetation. Other sources of noise included distant traffic at some locations (Highway 90, and Galbraith Line Road), local traffic, agricultural operations, dog barks, and aircraft passing overhead. The following general observations about the existing sound levels in the study area can be drawn from the measurement results:

- In general, local and distant traffic are the most common sources of existing sound. State Highway 90 and Galbraith Line Road are significant sources of existing sound and consistently influence sound levels at the locations S2 and F1 during both daytime and nighttime.
- Noise levels at all sites show a diurnal pattern, with daytime L_{90} noise levels regularly reaching 40 dBA, and nighttime noise L_{90} dBA levels in the 20s and 30s.
- From the level versus time figures, the effect of wind on sound levels is clear. For example, on June 28, 2024, L_{90} sound levels reached 45 dBA during high winds. On most other days the L_{90} sound level does not exceed 40 dBA.
- Measurements conducted under conditions conducive for wind turbine operations showed greater measured values by 2-3 dBA due to wind-induced noise.

The measured sound levels are summarized in Table D-3. The daytime L_{eq} across all six locations ranged from 39 to 53 dBA with an average of 44 dBA, and L_{90} levels ranged from 30 to 35 dBA with an average of 32 dBA. The nighttime L_{eq} across all six locations ranged from 33 to 45 dBA with an average of 37 dBA, and L_{90} levels ranged from 25 to 32 dBA with an average of 27 dBA. Plots of the measured noise levels versus time for each long-term measurement location can be found at the end of this appendix. A sample noise level versus time plot is shown in Figure D-2.

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

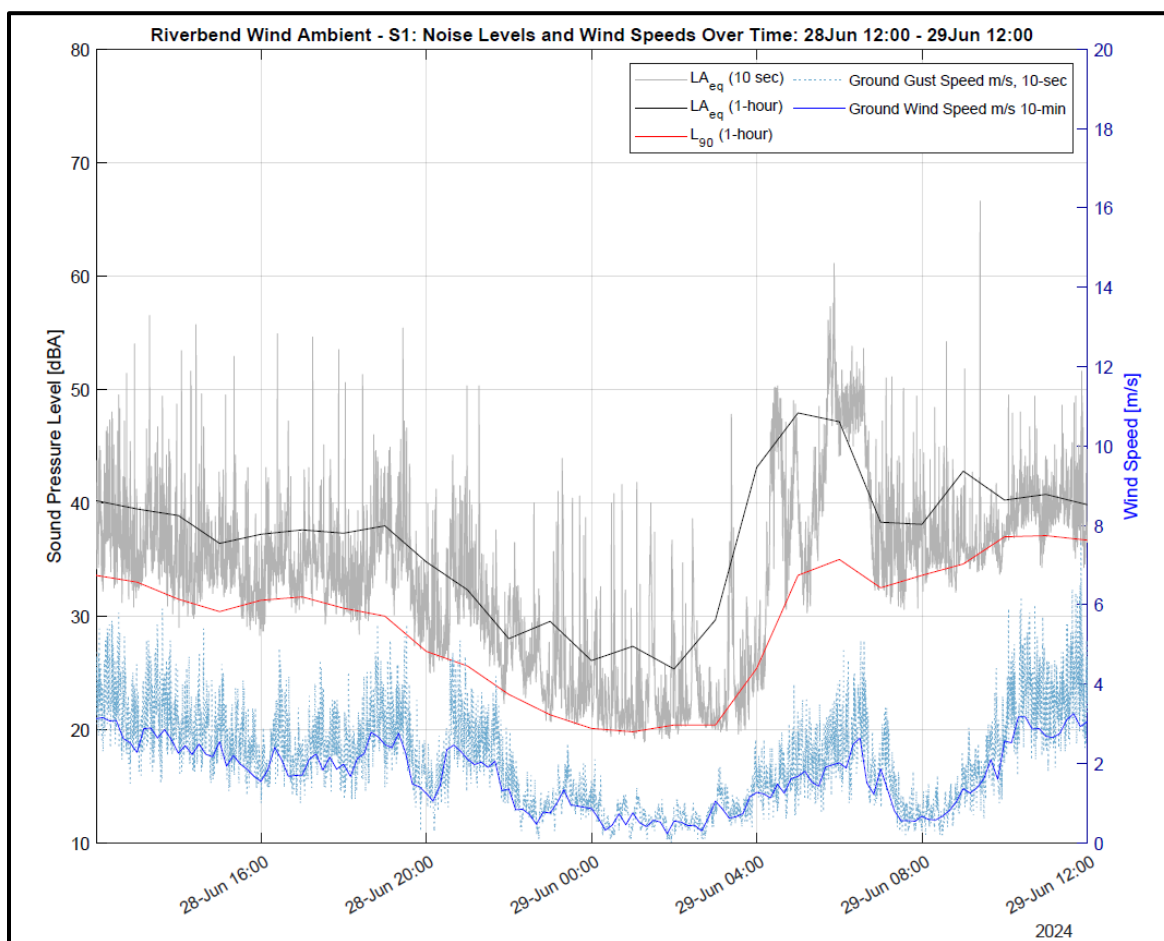


Figure D-2. Sample Time Plot of Long-Term Background Noise Levels at S1

Table D-3. Summary of Measured Ambient Noise Levels – All Conditions

Location	Daytime Noise Levels (dBA)				Nighttime Noise Levels (dBA)				Overall Noise Levels (dBA)			
	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{eq}	L ₁₀	L ₅₀	L ₉₀
F1	53	57	42	34	45	43	32	27	50	52	38	31
F2	45	45	37	32	35	36	31	27	41	42	35	30
F3	42	44	35	30	35	36	29	25	40	41	33	28
Fremont Average	47	49	38	32	39	39	30	26	44	45	35	30
S1	39	40	34	31	34	36	30	27	37	39	33	29
S2	43	45	39	35	39	40	35	32	42	43	38	34
S3	41	43	36	32	33	35	30	26	38	40	34	30
Speaker Average	41	43	37	32	35	37	32	28	39	41	35	31
Site-Wide Average	44	46	37	32	37	38	31	27	41	43	35	30

D2.2 Wind Regression Analysis Results

The results of this analysis for all locations are shown on an L_{eq} , L_{10} , L_{50} , and an L_{90} basis in Table D-4. All the levels shown in the table were measured when the nearest turbines would be operating at full noise emissions. On an L_{90} basis, levels are as low as 19 dBA when there is a large degree of separation between ground-level and hub-height wind speeds, and as high as 45 dBA when there is little separation. On an L_{50} basis, levels are as low as 19 dBA and reach over 55 dBA but are generally in the mid 30's dBA. Figure D-3 shows an example result for location S1 during the nighttime period. In this example, mean L_{50} levels are approximately 30 dBA at a hub-height wind speed of 9 m/s or greater on average.

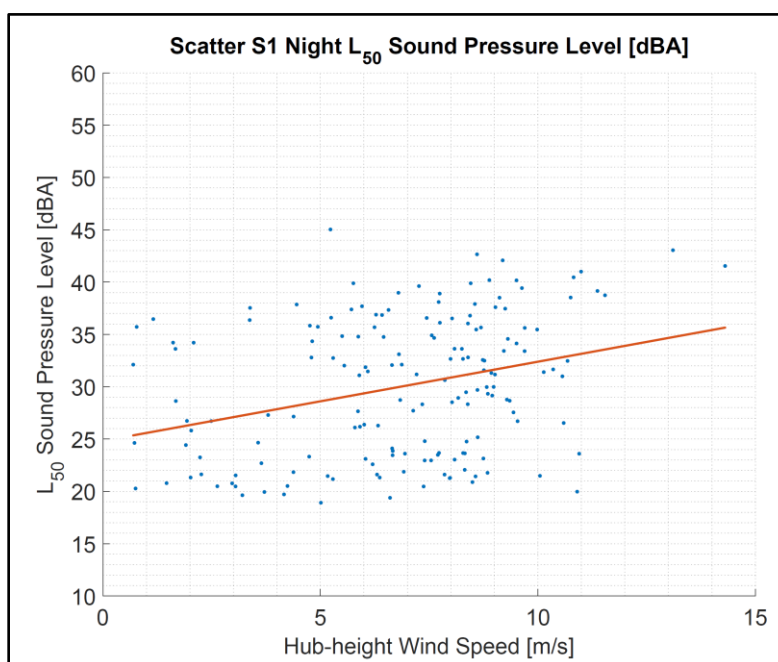


Figure D-3. Sample Ambient Noise Levels vs. Wind Speed Regression

Table D-4. Ambient Noise Levels - Full Turbine Acoustic Emissions

Location	Daytime Noise Levels (dBA)				Nighttime Noise Levels (dBA)				Overall Noise Levels (dBA)			
	L_{eq}	L_{10}	L_{50}	L_{90}	L_{eq}	L_{10}	L_{50}	L_{90}	L_{eq}	L_{10}	L_{50}	L_{90}
F1	54	58	47	40	47	46	35	30	51	53	42	36
F2	49	51	45	41	38	40	35	31	44	46	41	37
F3	46	49	42	38	36	37	31	28	41	43	37	32
Fremont Average	50	52	45	39	41	41	34	30	45	47	40	35
S1	42	45	39	35	37	39	34	30	40	42	37	33
S2	45	46	42	39	40	41	37	34	42	44	40	36
S3	44	46	41	37	34	36	32	28	39	41	36	32
Speaker Average	44	46	41	37	37	39	34	31	40	42	37	34
Site-Wide Average	47	49	43	38	39	40	34	30	43	45	39	34

D2.3 Comparison of Existing and Predicted Noise Levels

Project noise levels were predicted and used to compare to measured ambient noise levels to quantify the noise impacts from the Project.

Noise levels were predicted using the method prescribed by International Organization for Standardization (ISO) Standard 9613-2:2024, Attenuation of Sound During Propagation Outdoors and implemented using the SoundPLAN v9.1 software program. Detailed information describing the input data and settings used with the ISO 9613-2:2024 method to predict noise levels from the Project can be found in the pre-construction report above. Table D-5 shows the measured ambient L_{eq} , L_{10} , L_{50} , and L_{90} levels and the corresponding predicted levels for each measurement location. Also shown in the table is the total noise (existing ambient plus predicted noise level) and the increase over ambient levels from total noise levels.

Table D-5. Predicted Operational and Measured Ambient Noise Levels

Noise Contribution	Site	Vestas V162-6.0MW STE				Nordex 169-5.0 LNTE mode 0			
		L_{eq} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)	L_{eq} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)
Ambient Noise Levels	F1	51	53	42	36	51	53	42	36
	F2	44	46	41	37	44	46	41	37
	F3	41	43	37	32	41	43	37	32
	S1	40	42	37	33	40	42	37	33
	S2	42	44	40	36	42	44	40	36
	S3	39	41	36	32	39	41	36	32
Project Maximum Operations	F1	39	39	39	39	41	41	41	41
	F2	41	41	41	41	44	44	44	44
	F3	31	31	31	31	33	33	33	33
	S1	43	43	43	43	45	45	45	45
	S2	40	40	40	40	42	42	42	42
	S3	39	39	39	39	41	41	41	41
Total Noise	F1	51	53	44	41	52	53	45	42
	F2	46	48	44	43	47	48	45	44
	F3	41	43	38	35	42	43	38	36
	S1	44	45	44	43	46	47	45	45
	S2	44	45	43	42	45	46	44	43
	S3	42	43	41	40	43	44	43	42
Increase over Ambient	F1	0	0	2	5	0	0	2	6
	F2	2	1	3	6	3	2	5	8
	F3	0	0	1	2	1	0	2	3
	S1	5	3	7	10	6	5	9	12
	S2	2	1	3	5	3	2	5	7
	S3	3	2	5	8	4	3	6	10

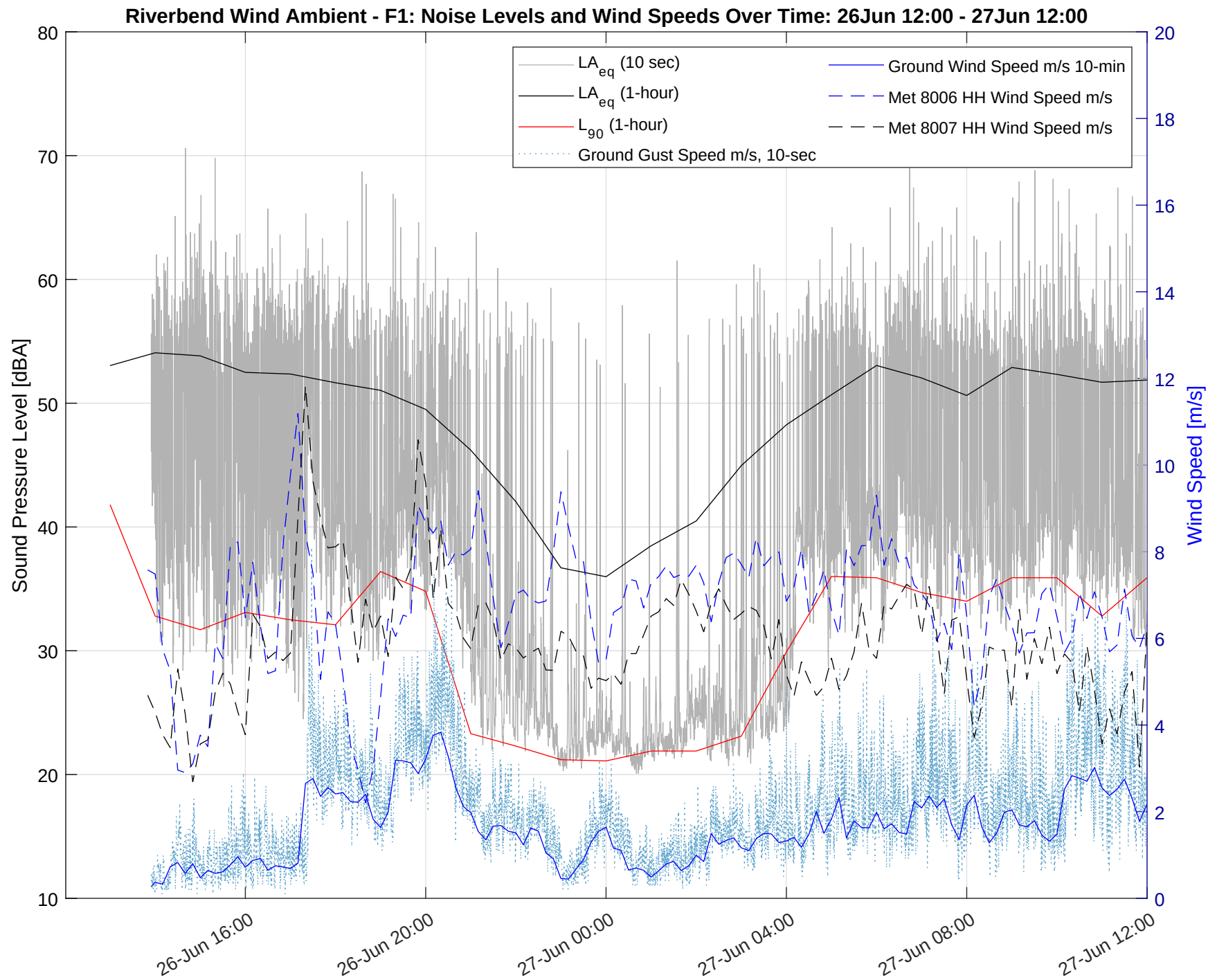
Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

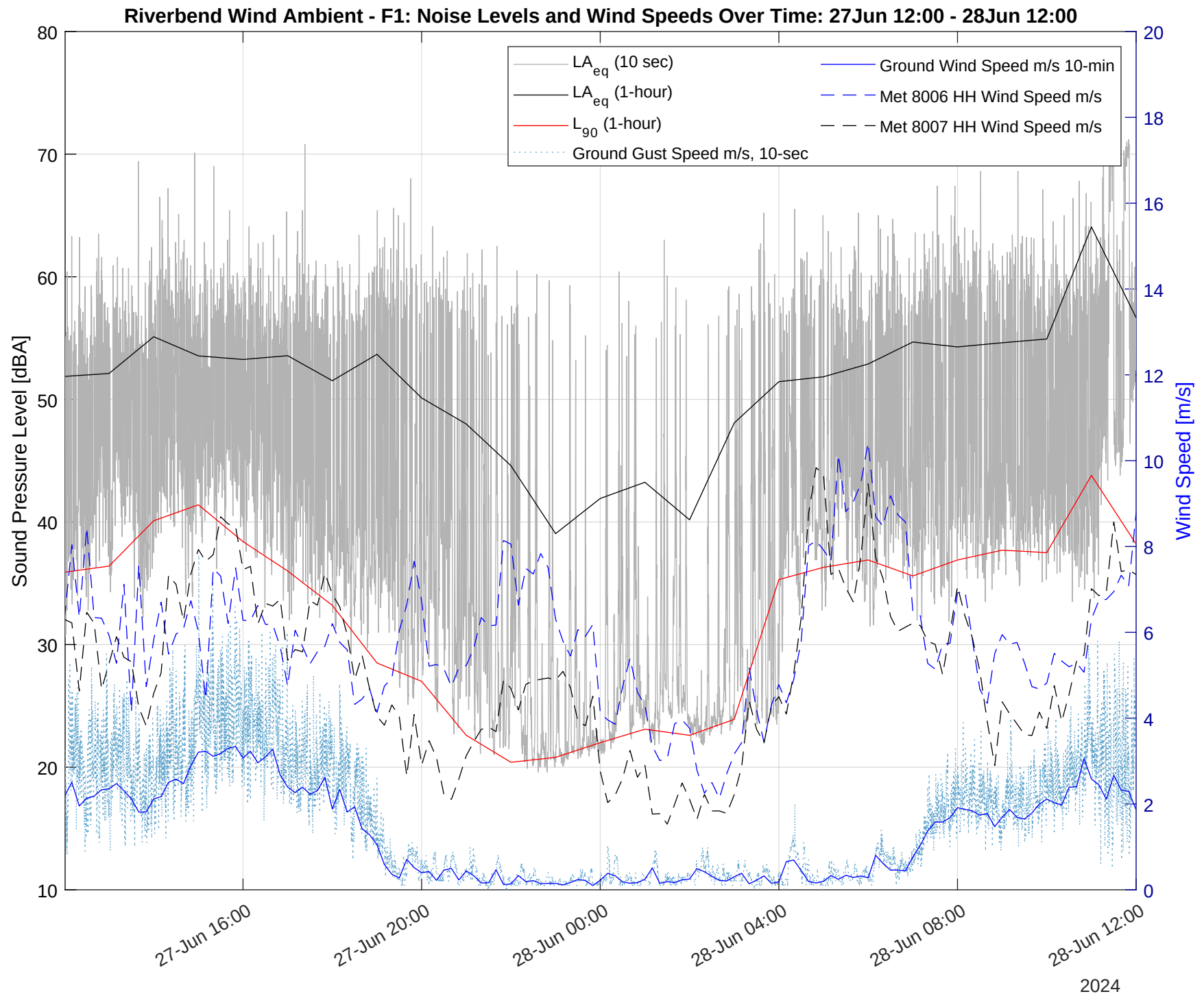
Noise Contribution	Site	Vestas V162-6.8MW STE				Vestas V162-7.2MW STE			
		L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)	L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)
Ambient Noise Levels	F1	51	53	42	36	51	53	42	36
	F2	44	46	41	37	44	46	41	37
	F3	41	43	37	32	41	43	37	32
	S1	40	42	37	33	40	42	37	33
	S2	42	44	40	36	42	44	40	36
	S3	39	41	36	32	39	41	36	32
Project Maximum Operations	F1	38	38	38	38	40	40	40	40
	F2	41	41	41	41	42	42	42	42
	F3	31	31	31	31	32	32	32	32
	S1	42	42	42	42	43	43	43	43
	S2	39	39	39	39	41	41	41	41
	S3	39	39	39	39	40	40	40	40
Total Noise	F1	51	53	44	40	52	53	44	41
	F2	46	47	44	42	46	48	44	43
	F3	41	43	38	35	41	43	38	35
	S1	44	45	43	42	45	46	44	43
	S2	44	45	42	41	45	46	43	42
	S3	42	43	41	40	42	43	41	41
Increase over Ambient	F1	0	0	1	4	0	0	2	5
	F2	2	1	3	6	2	1	4	6
	F3	0	0	1	2	1	0	1	3
	S1	4	3	6	9	5	3	7	11
	S2	2	1	3	5	2	2	3	5
	S3	3	2	4	7	4	3	5	8

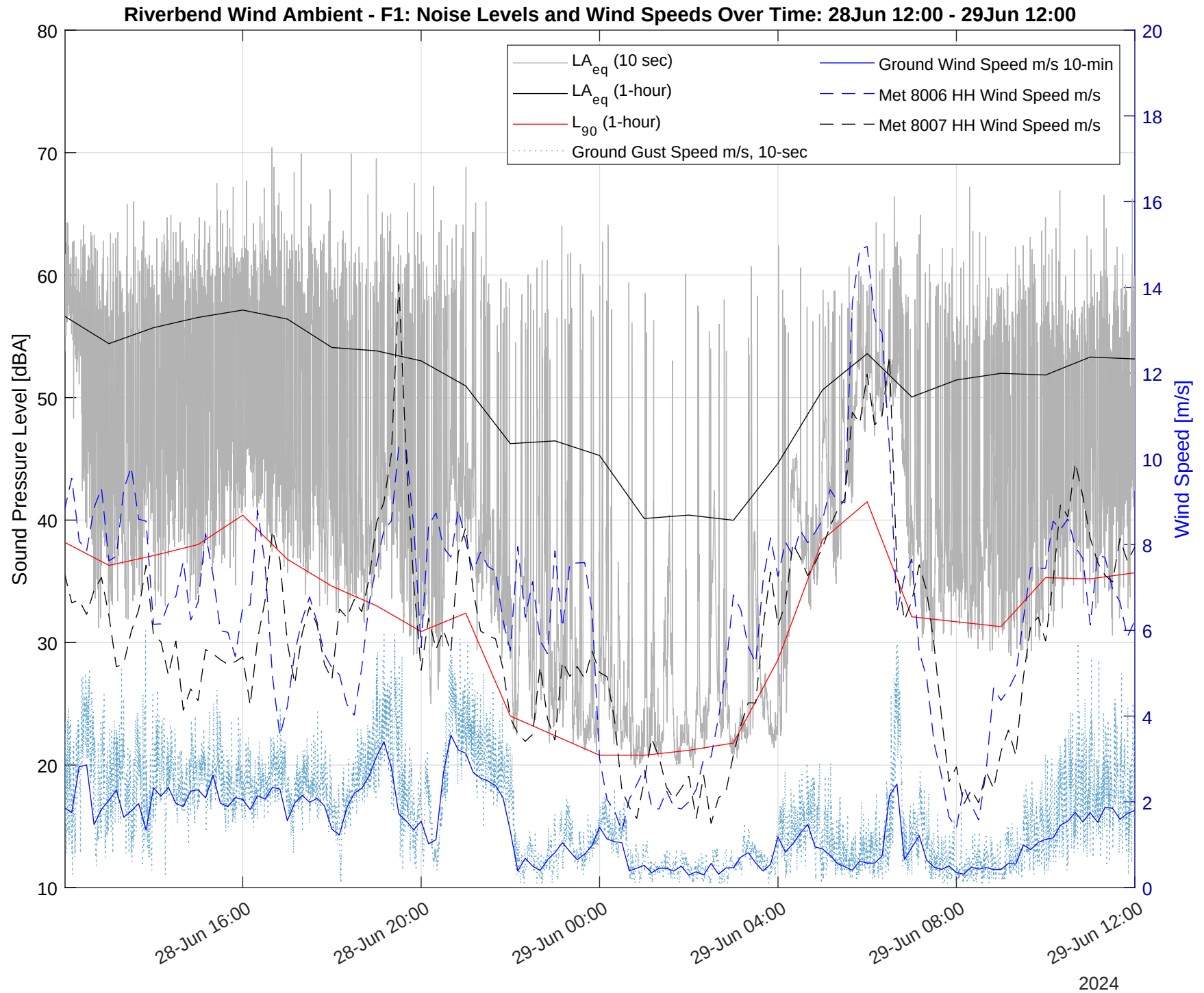
Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

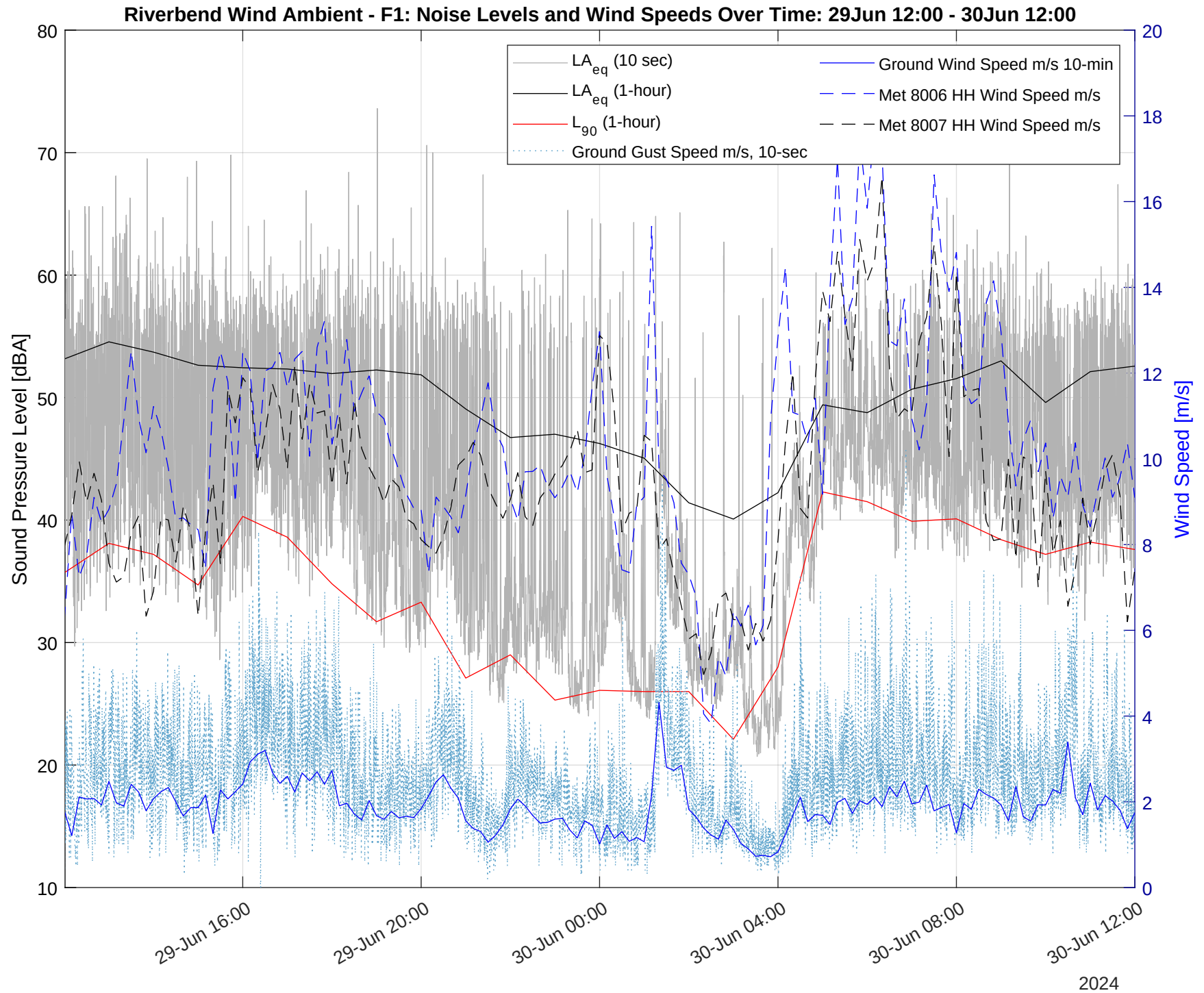
Noise Contribution	Site	Vestas V163-4.5MW STE			
		L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)
Ambient Noise Levels	F1	51	53	42	36
	F2	44	46	41	37
	F3	41	43	37	32
	S1	40	42	37	33
	S2	42	44	40	36
	S3	39	41	36	32
Project Maximum Operations	F1	41	41	41	41
	F2	44	44	44	44
	F3	33	33	33	33
	S1	45	45	45	45
	S2	42	42	42	42
	S3	41	41	41	41
Total Noise	F1	52	53	45	42
	F2	47	48	45	44
	F3	42	43	38	36
	S1	46	47	45	45
	S2	45	46	44	43
	S3	43	44	43	42
Increase over Ambient	F1	0	0	3	6
	F2	3	2	5	8
	F3	1	0	2	4
	S1	6	4	9	12
	S2	3	2	4	7
	S3	4	3	6	10

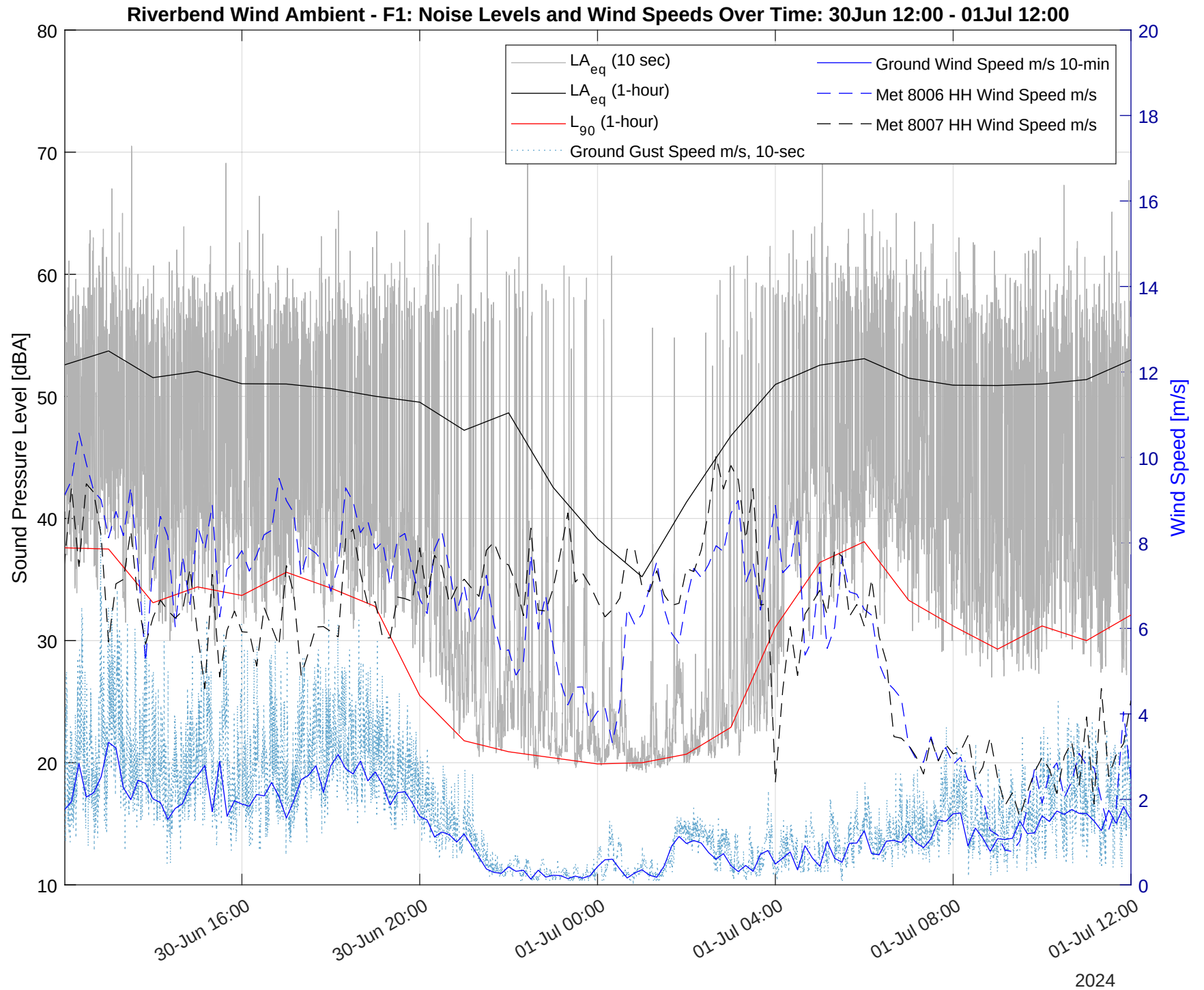
Time Plots of Measured Noise Levels and Meteorological Data

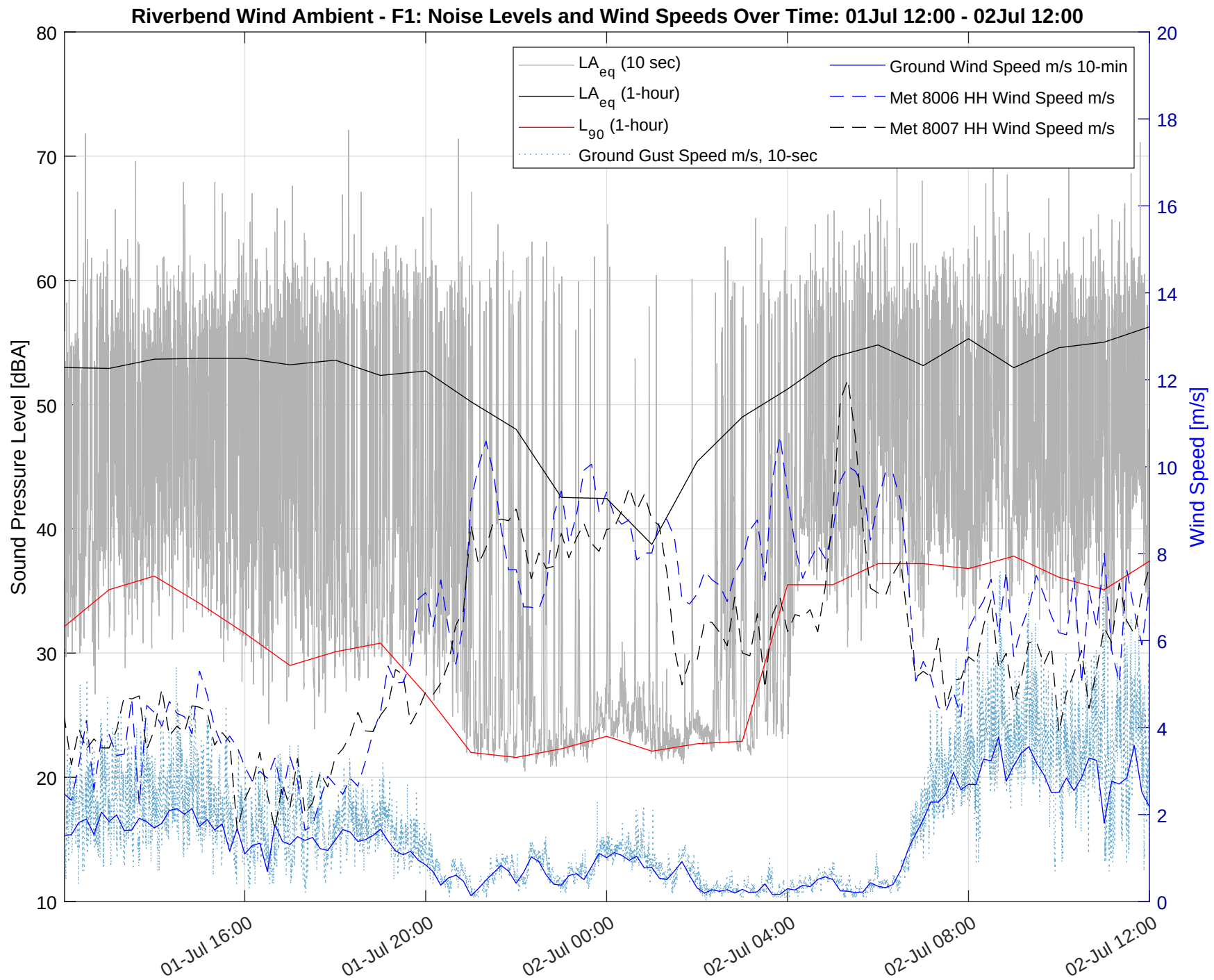


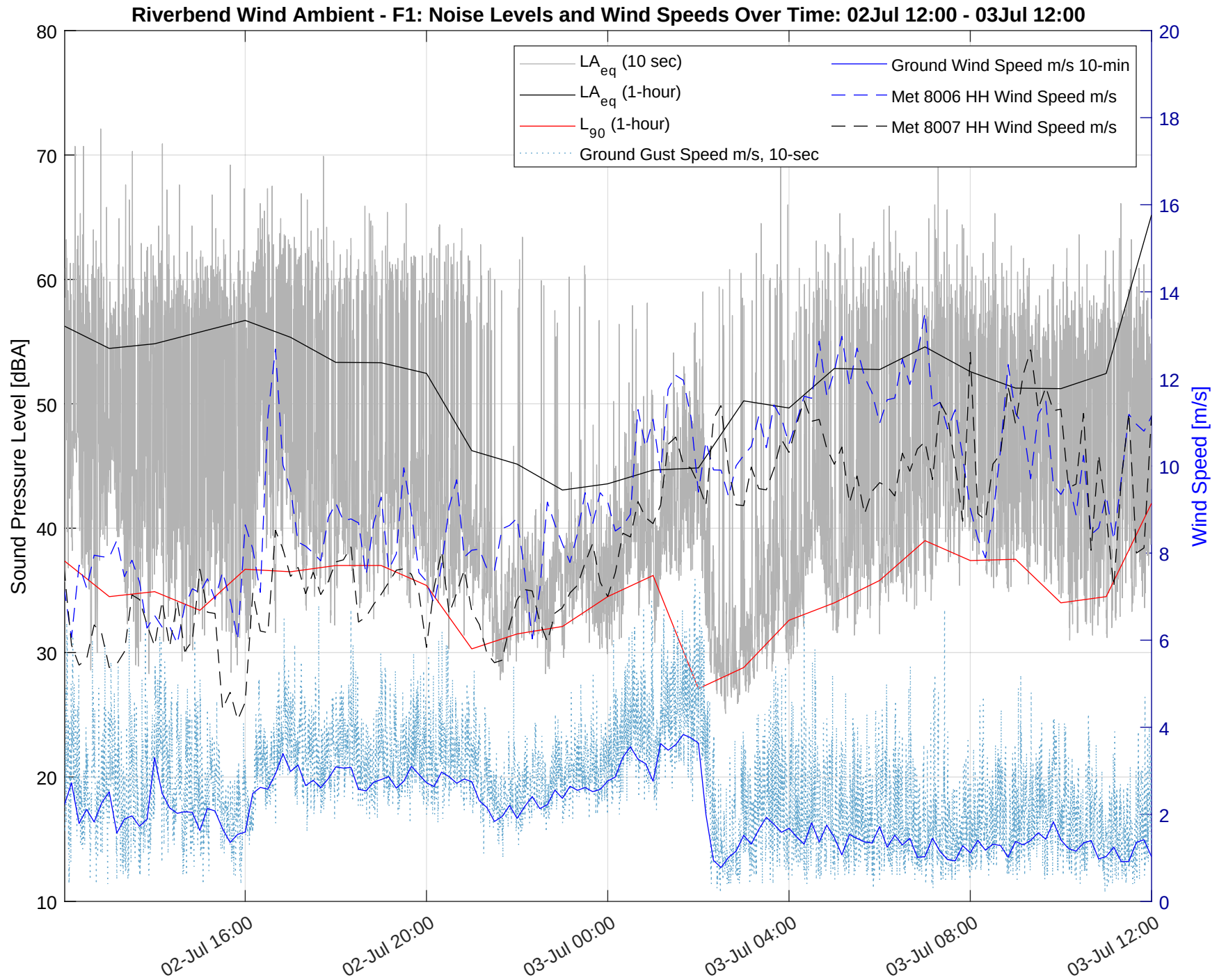


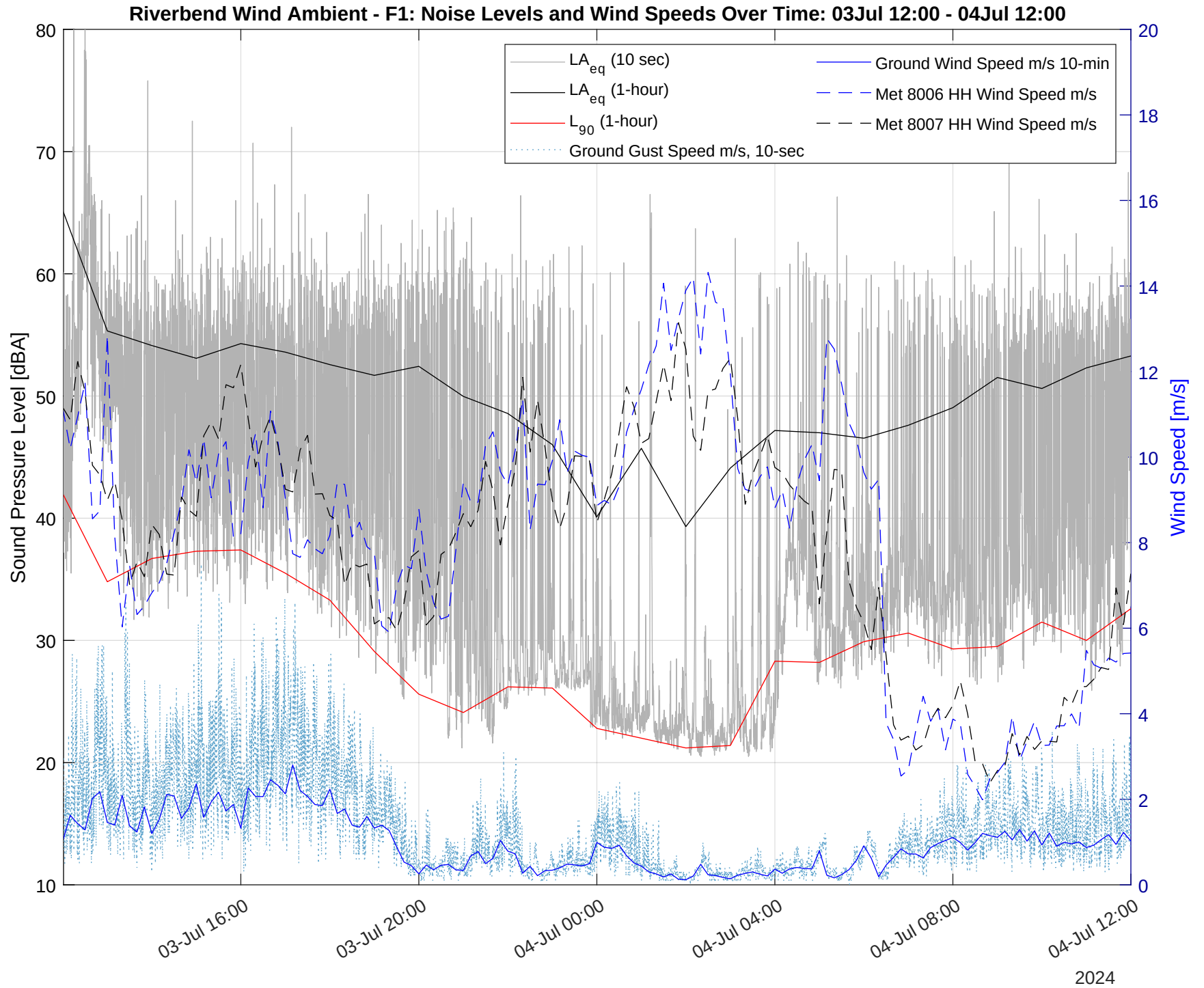


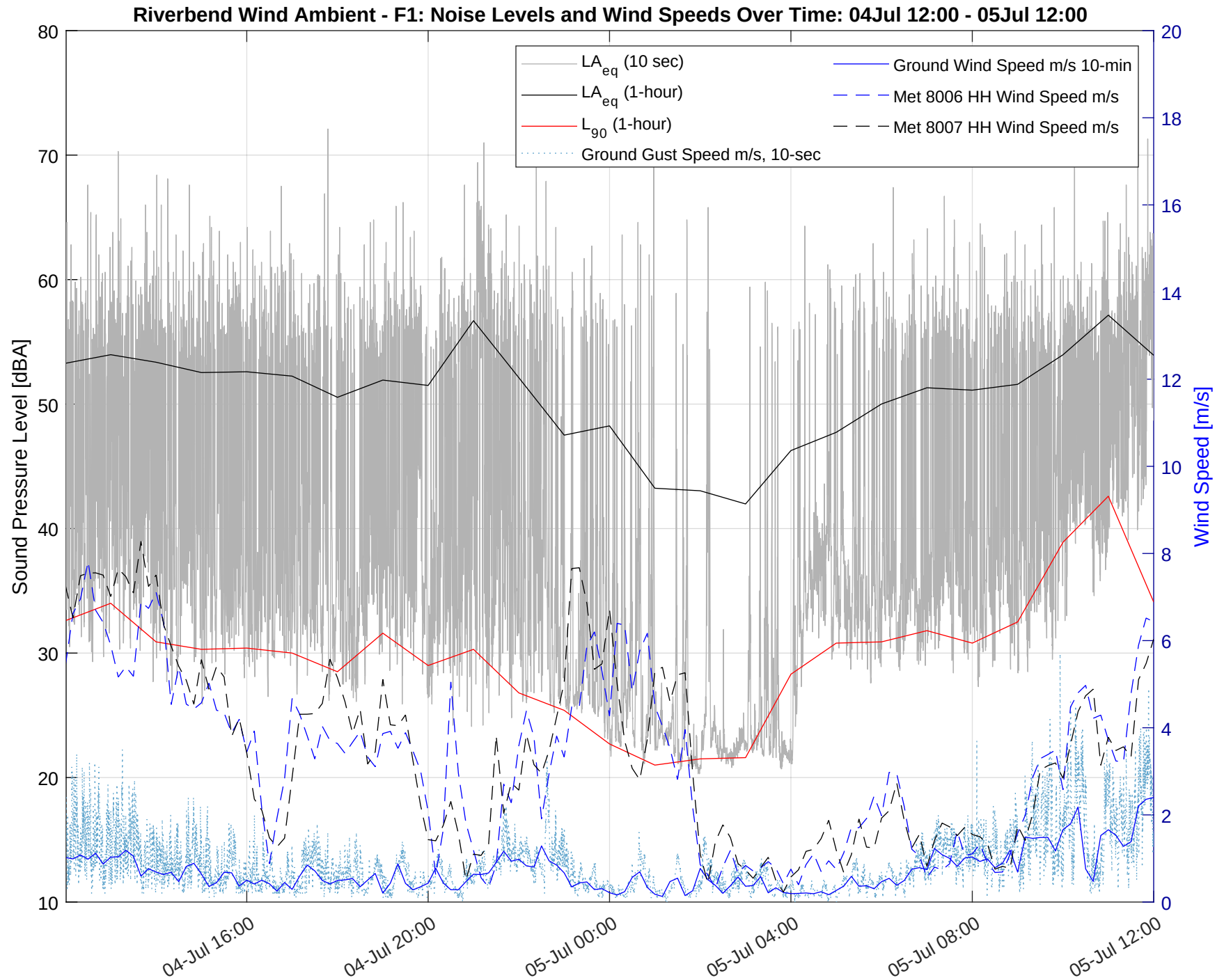


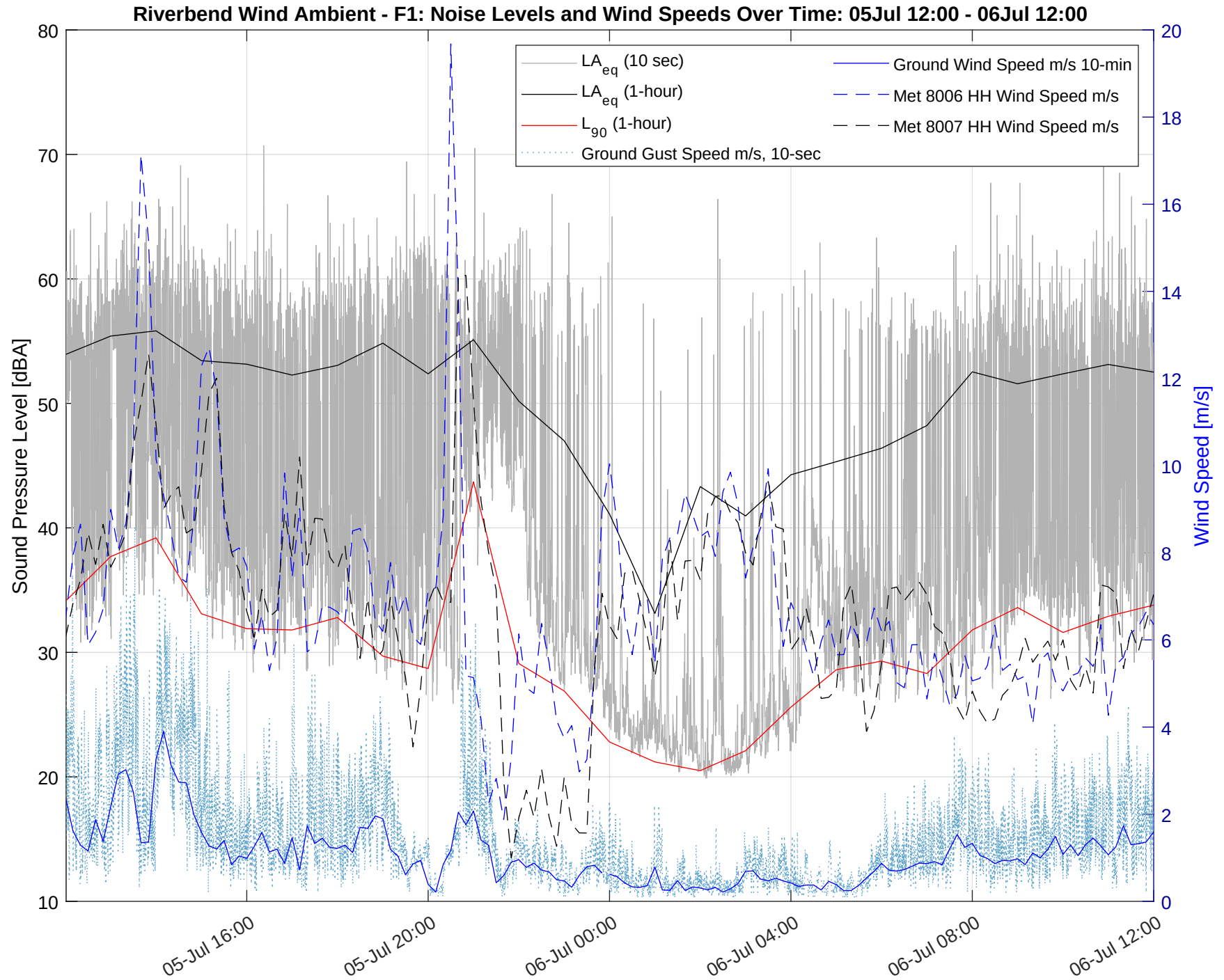


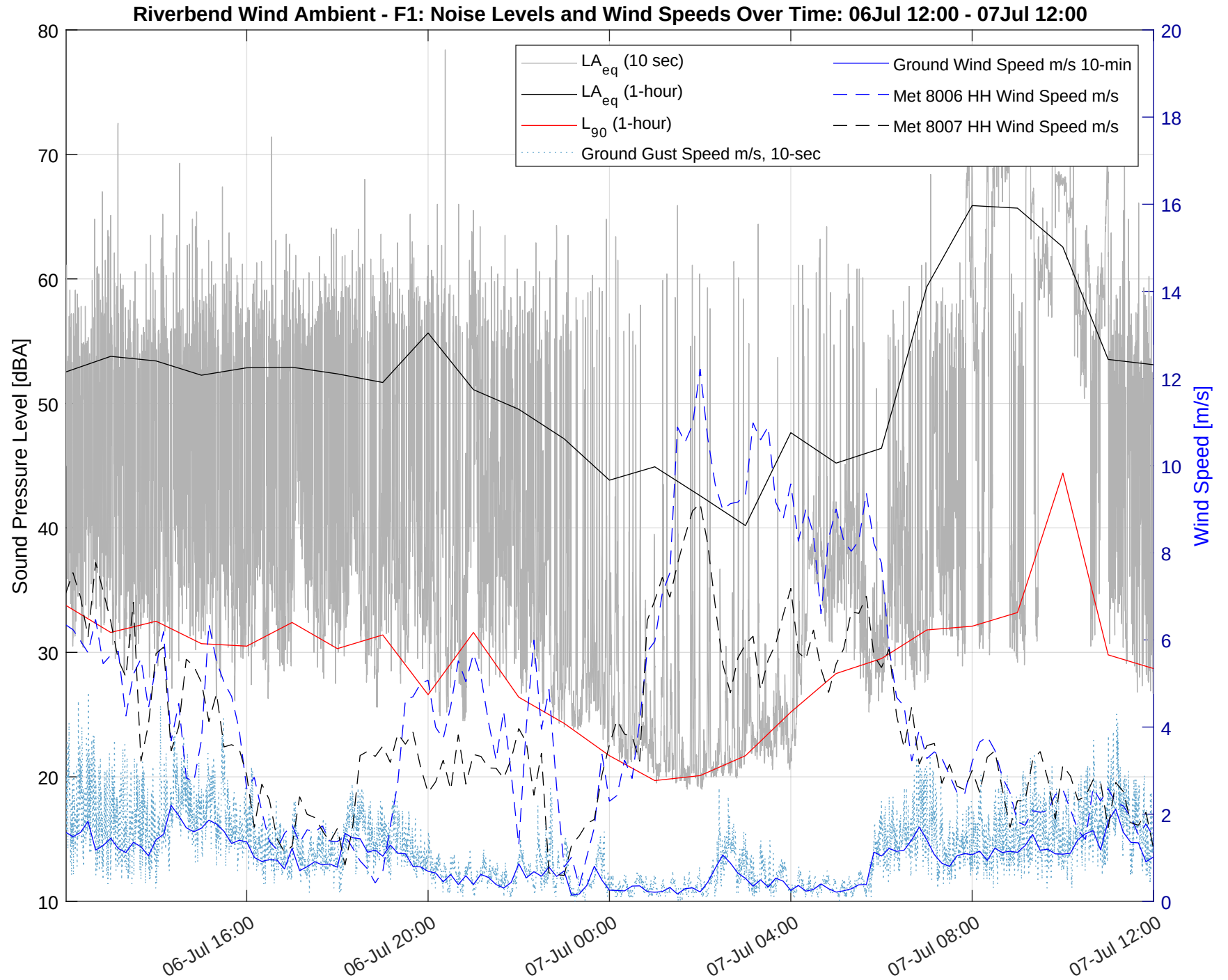


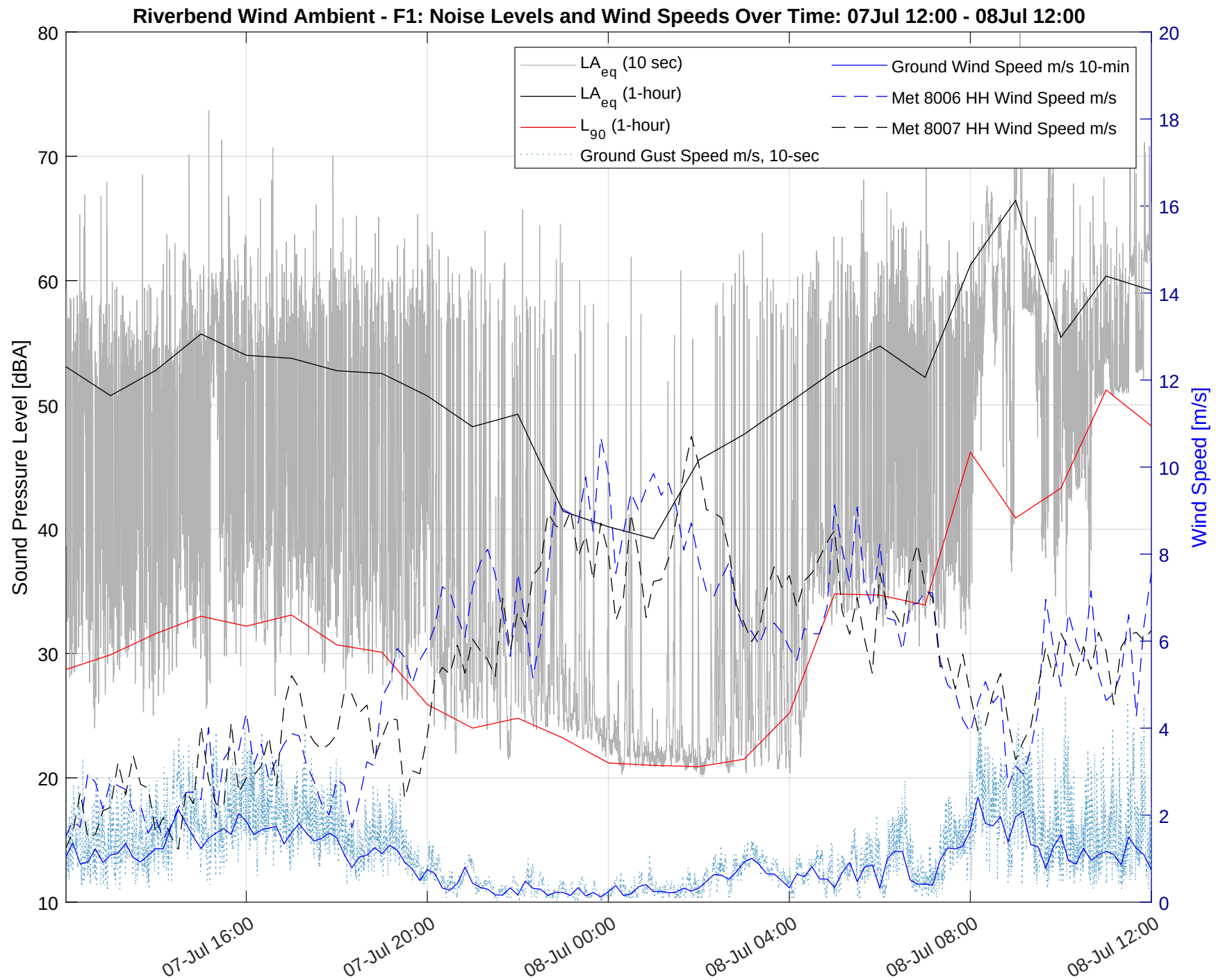


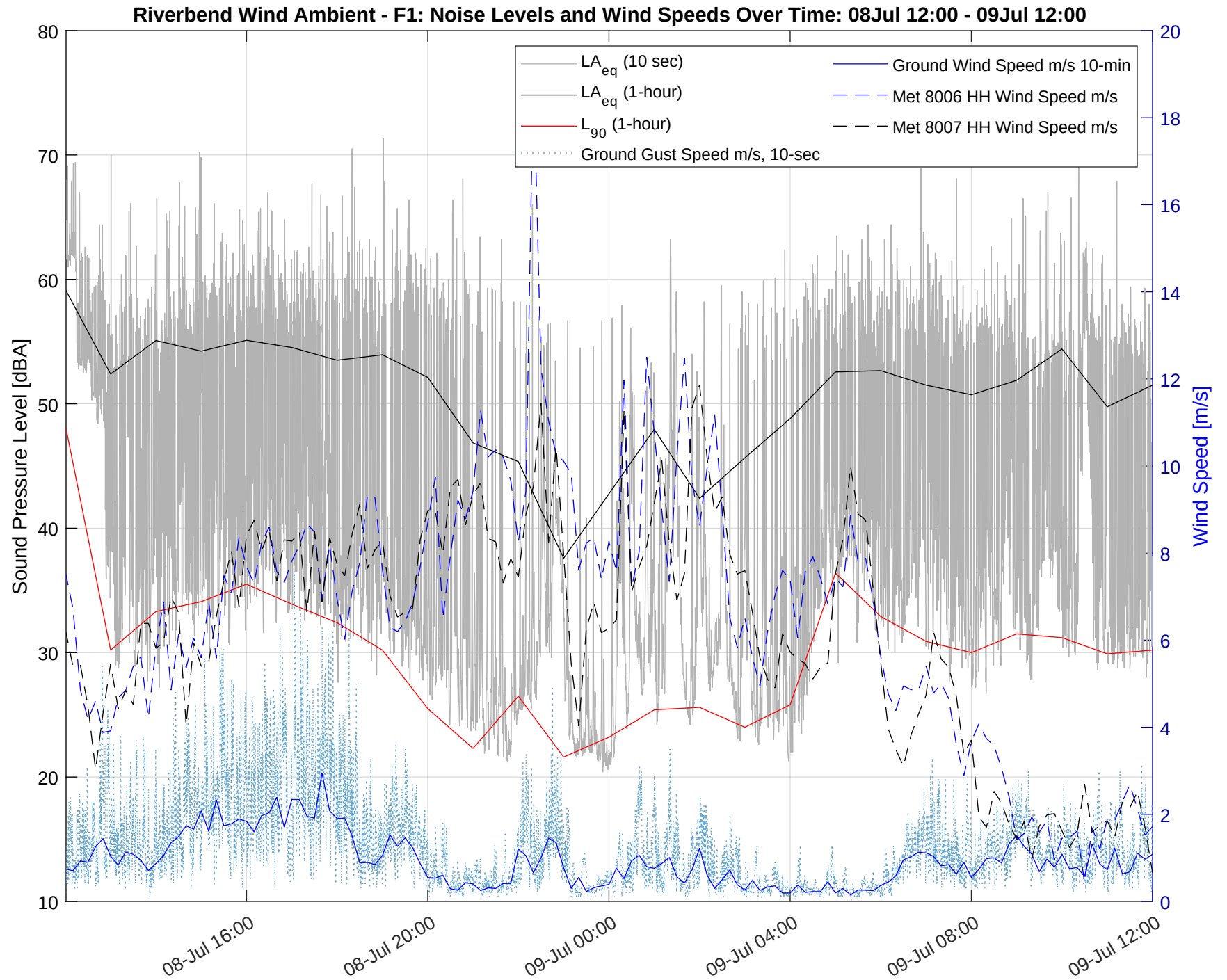


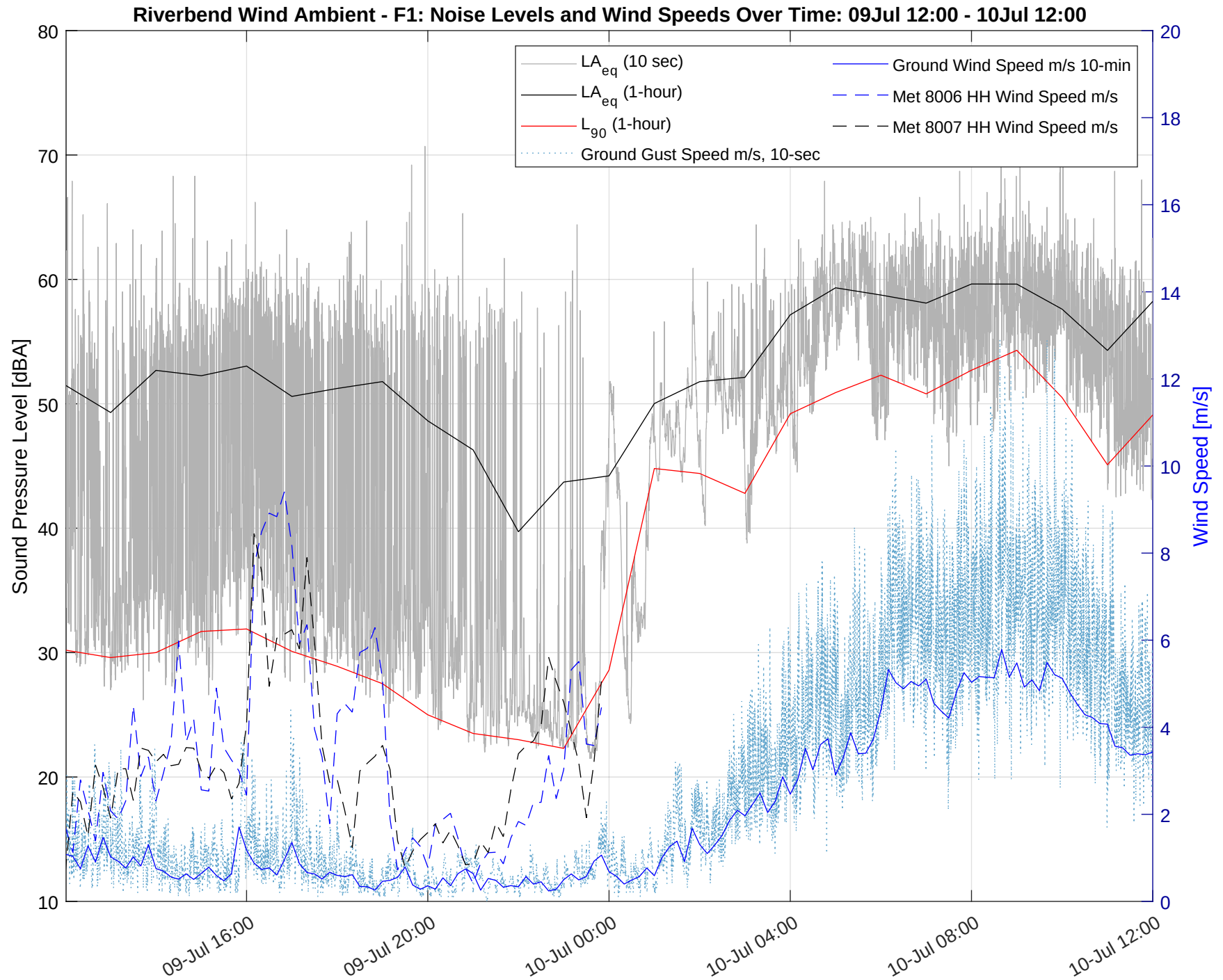


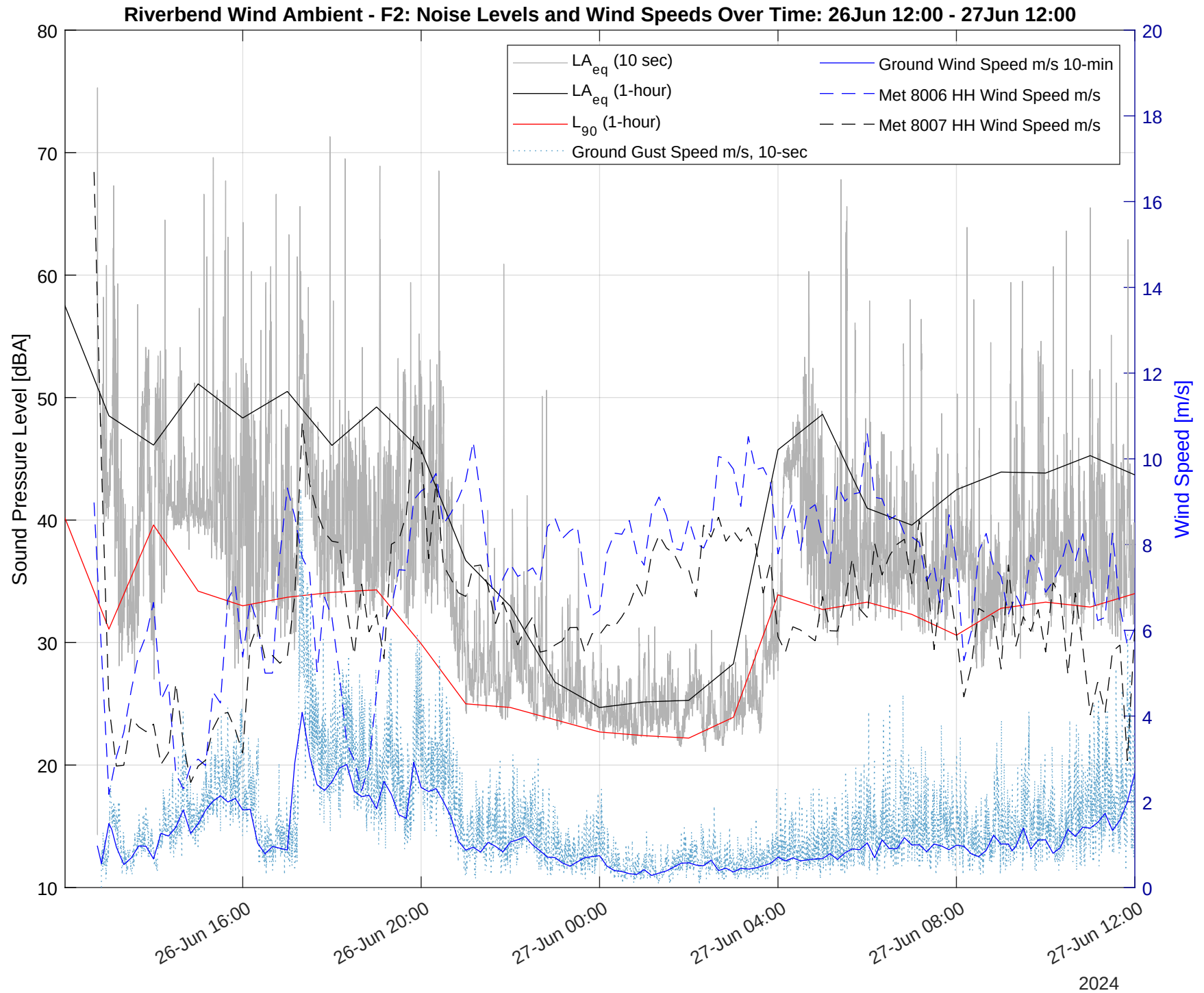


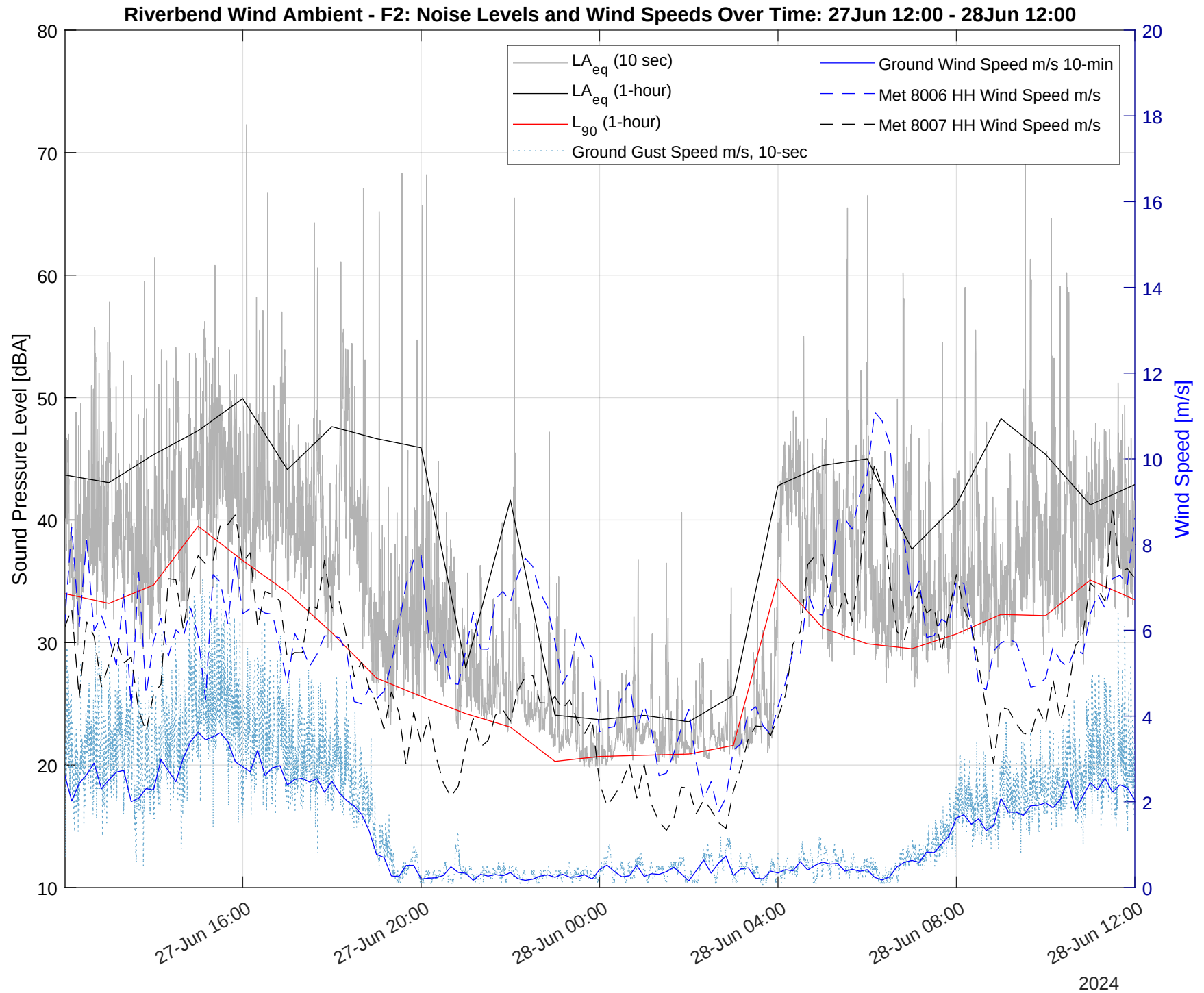


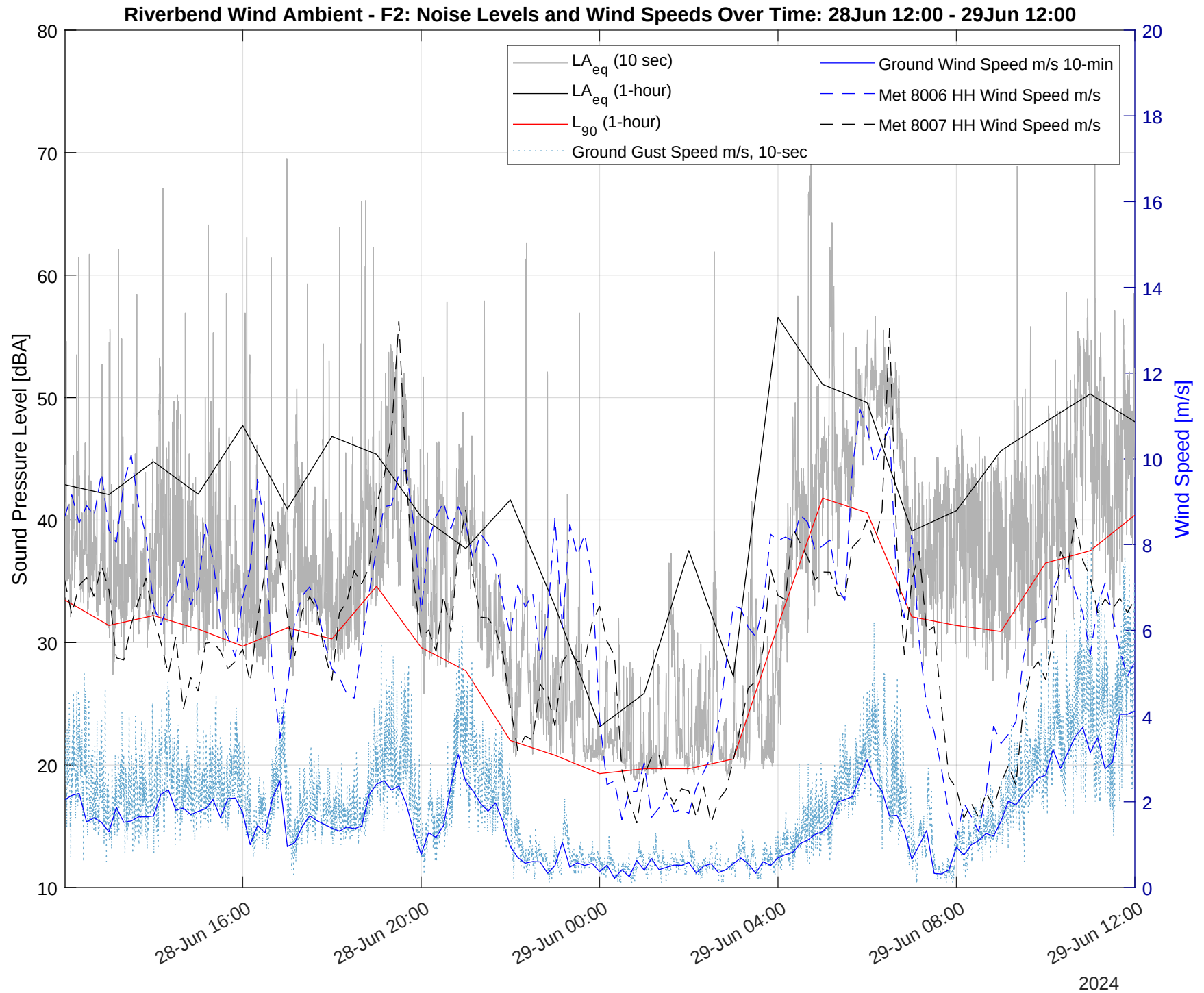


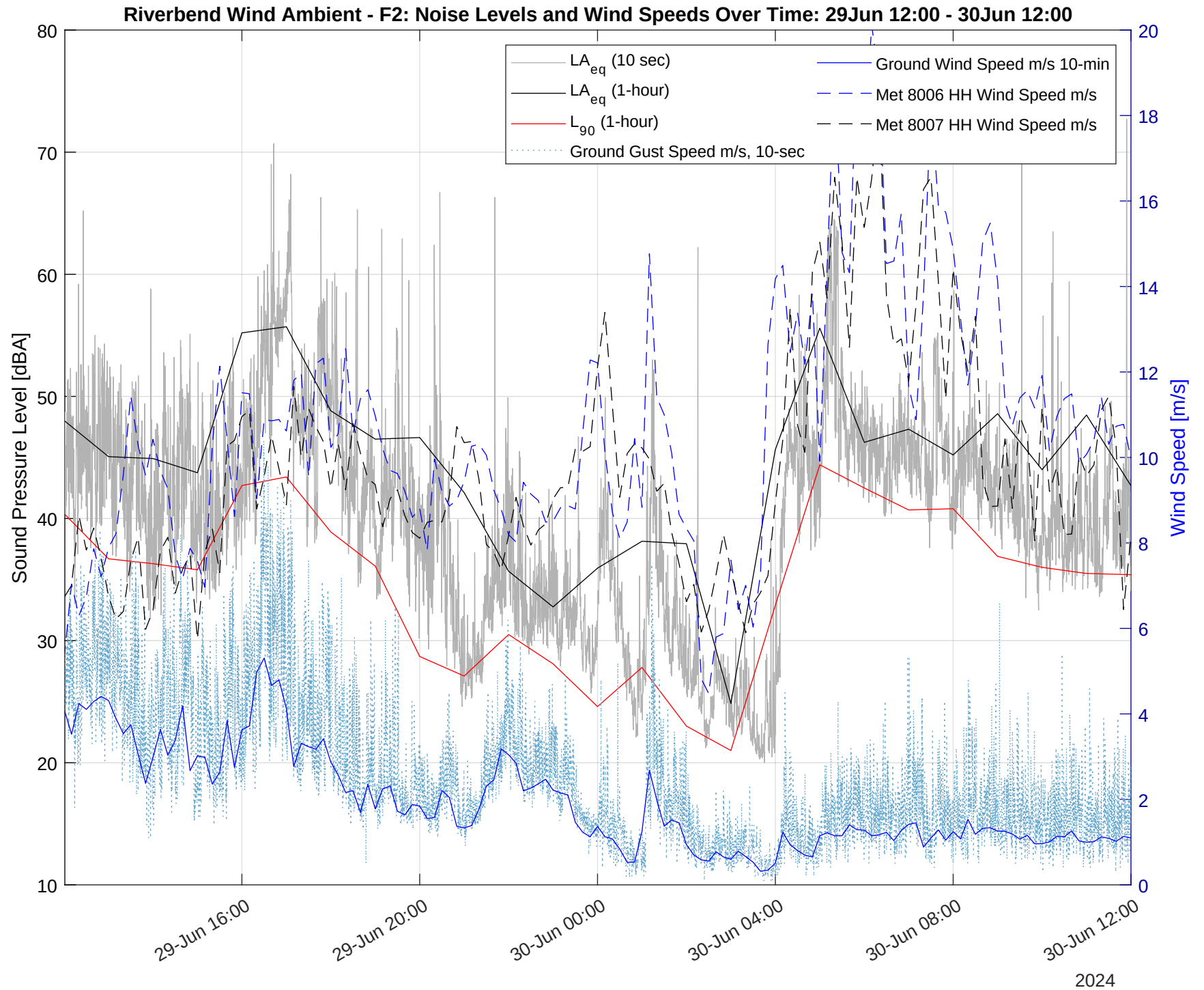


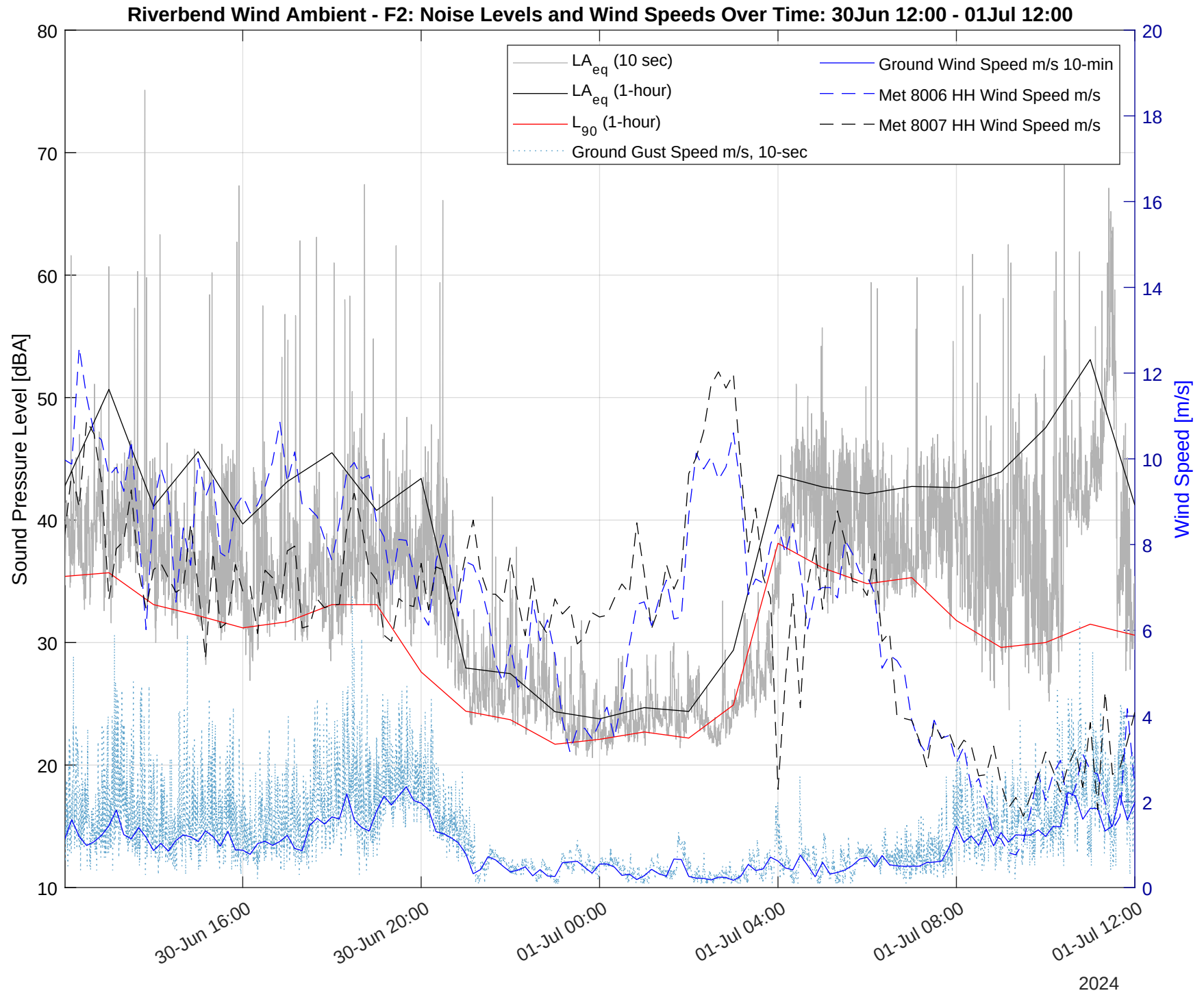


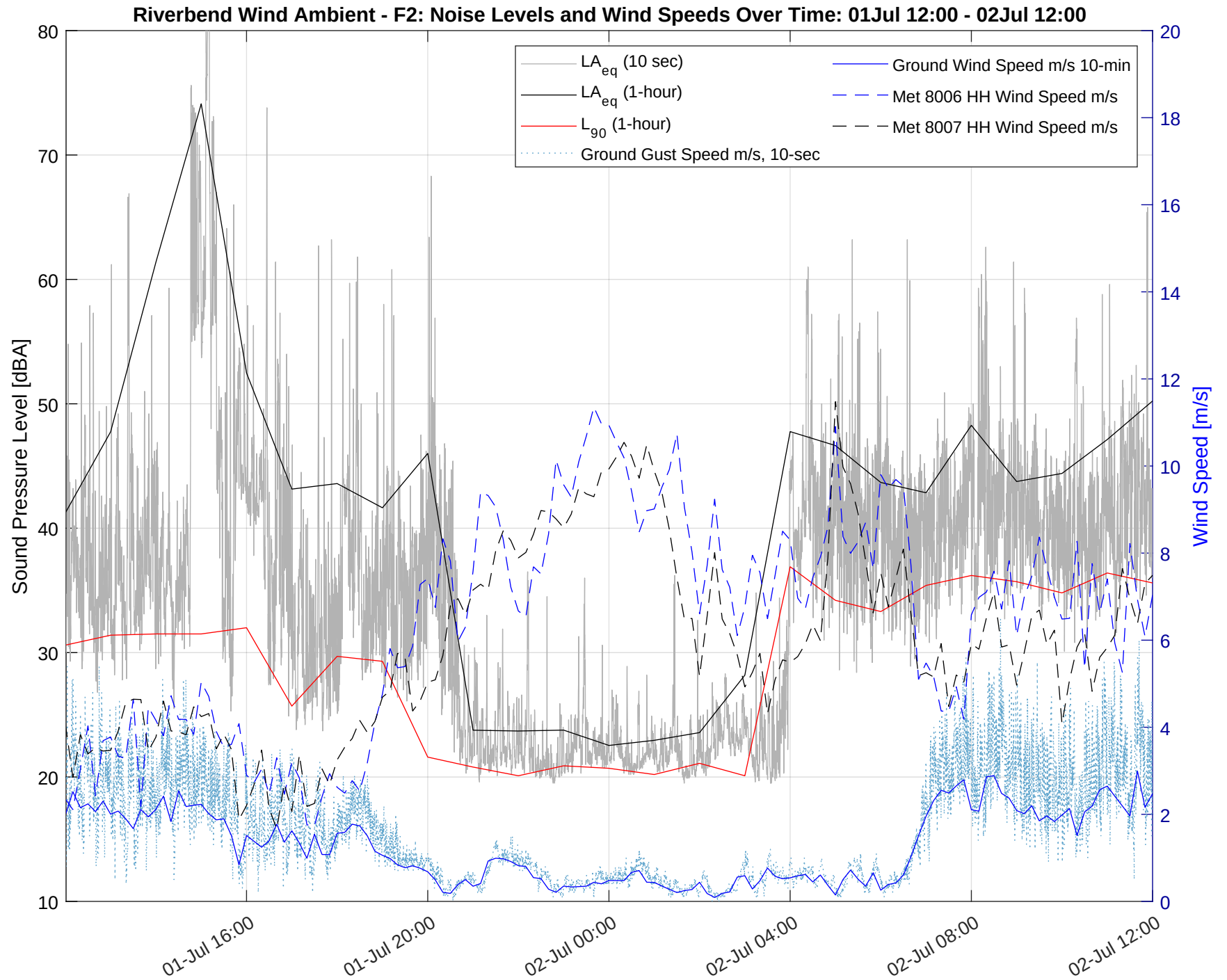


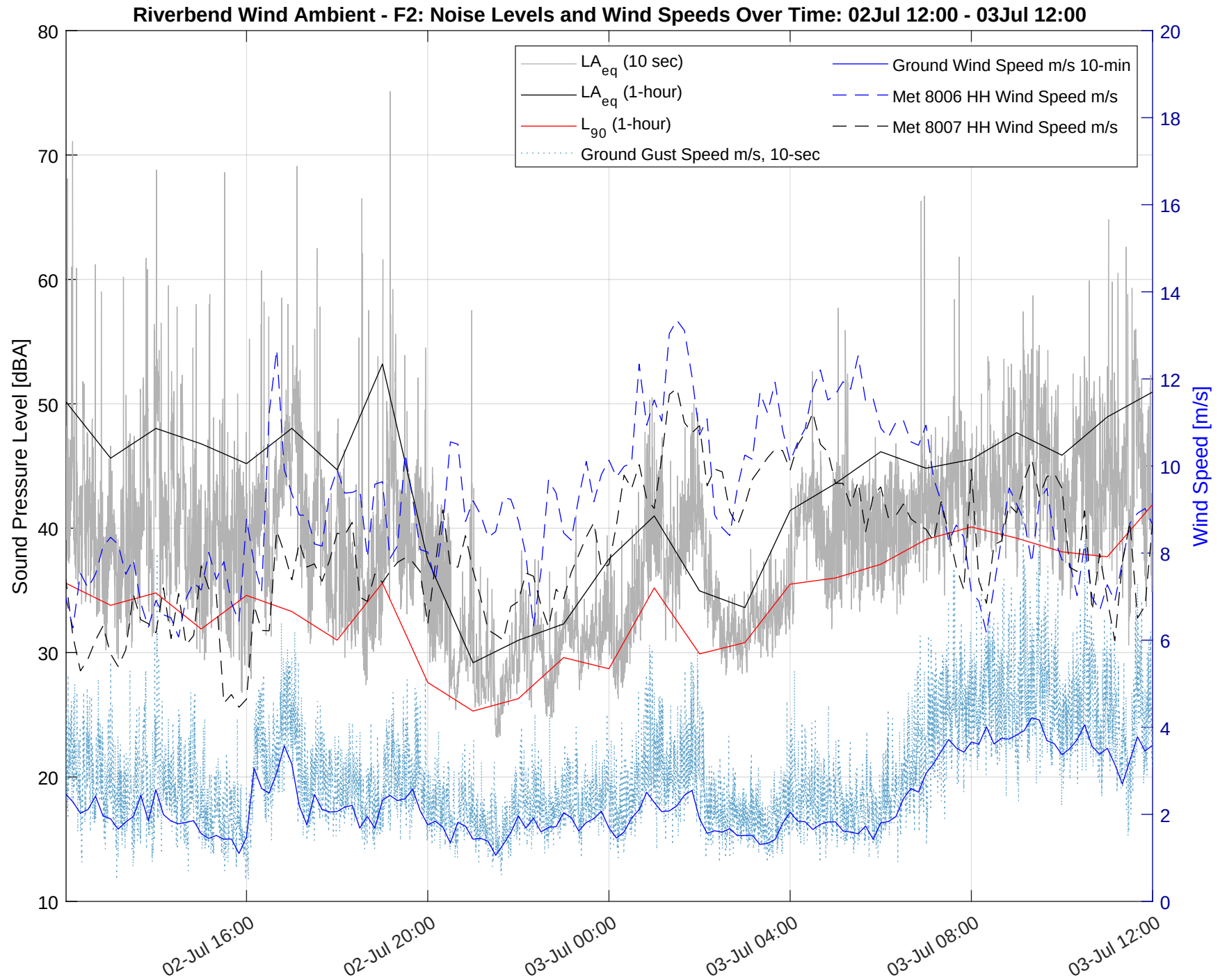


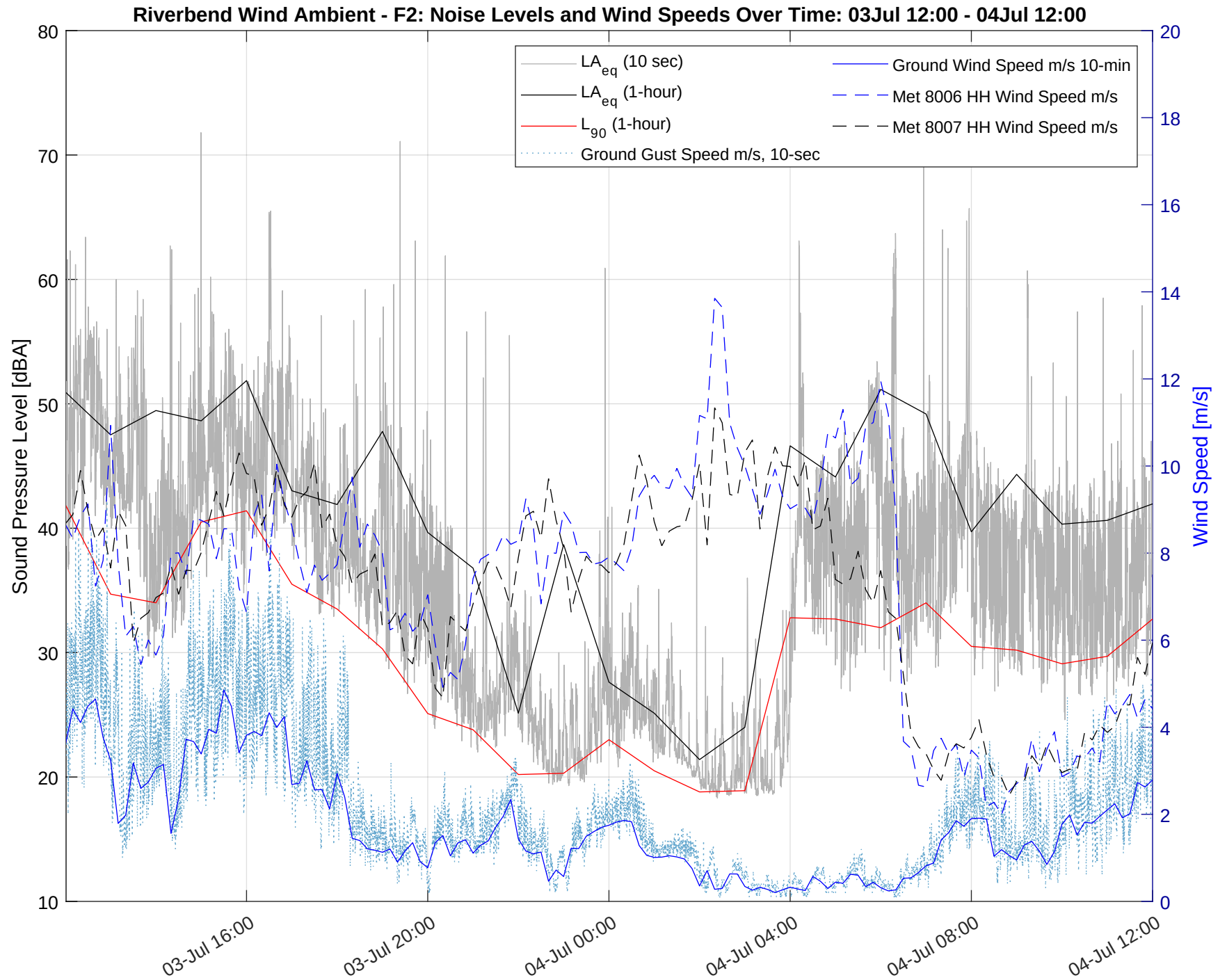


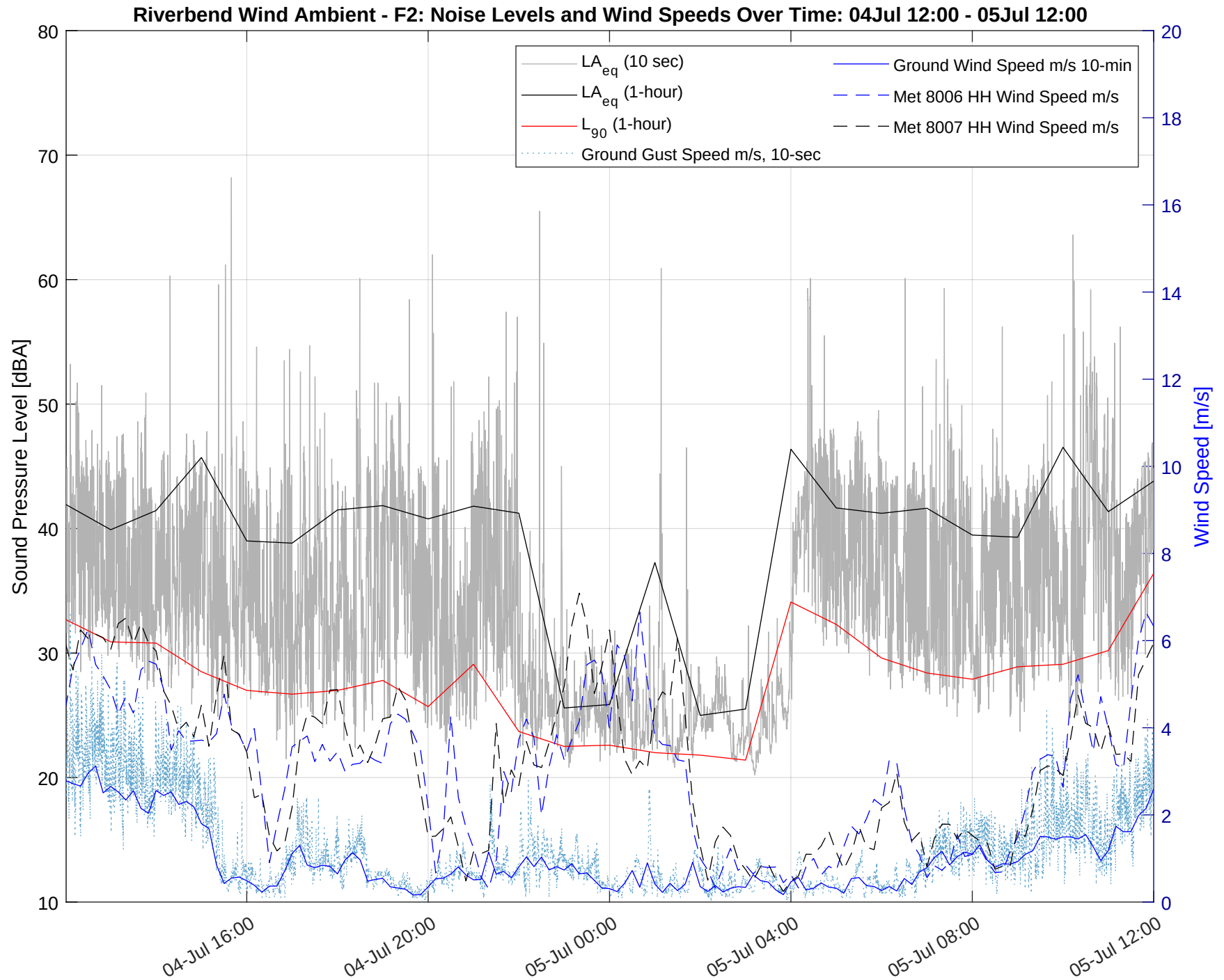


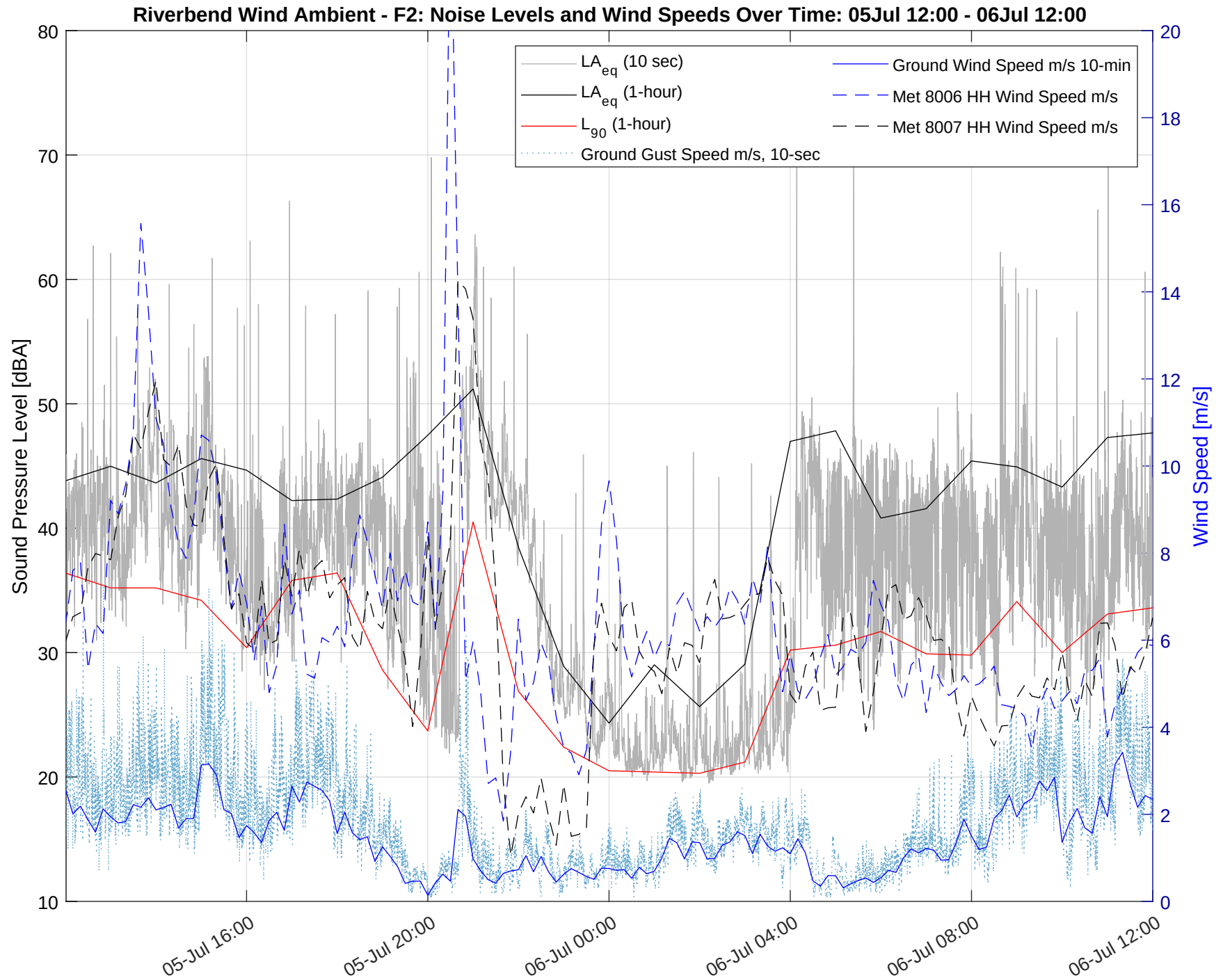


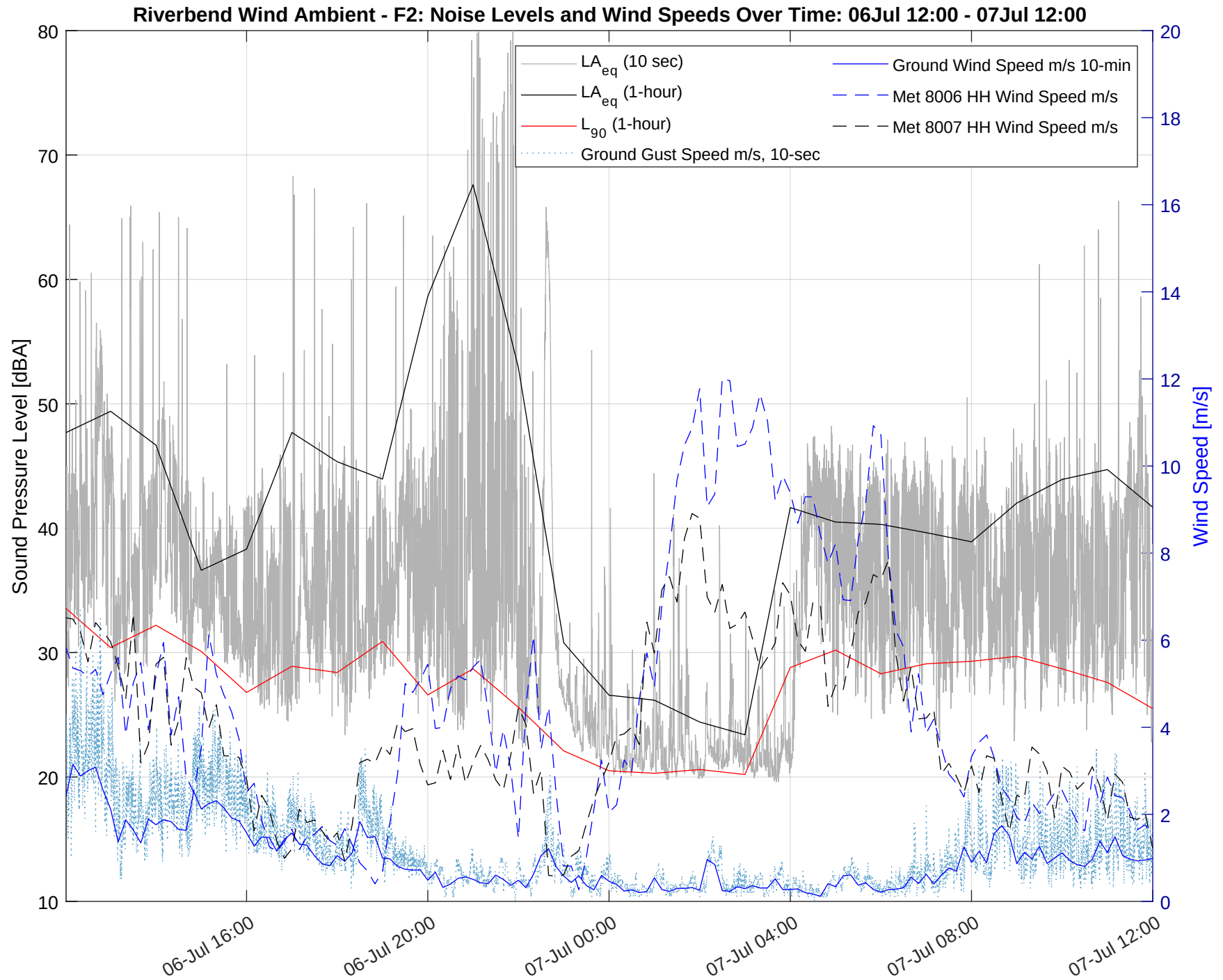


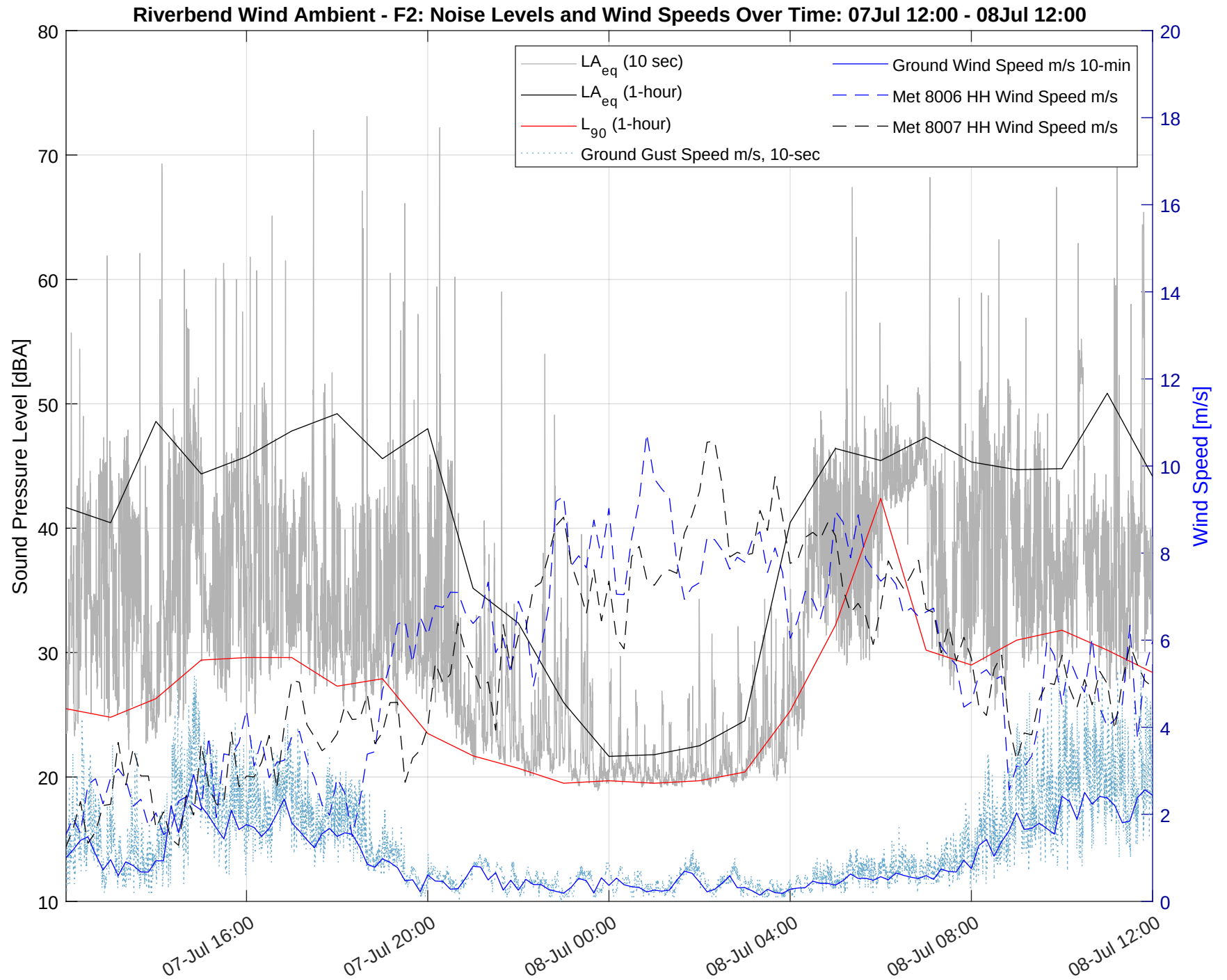


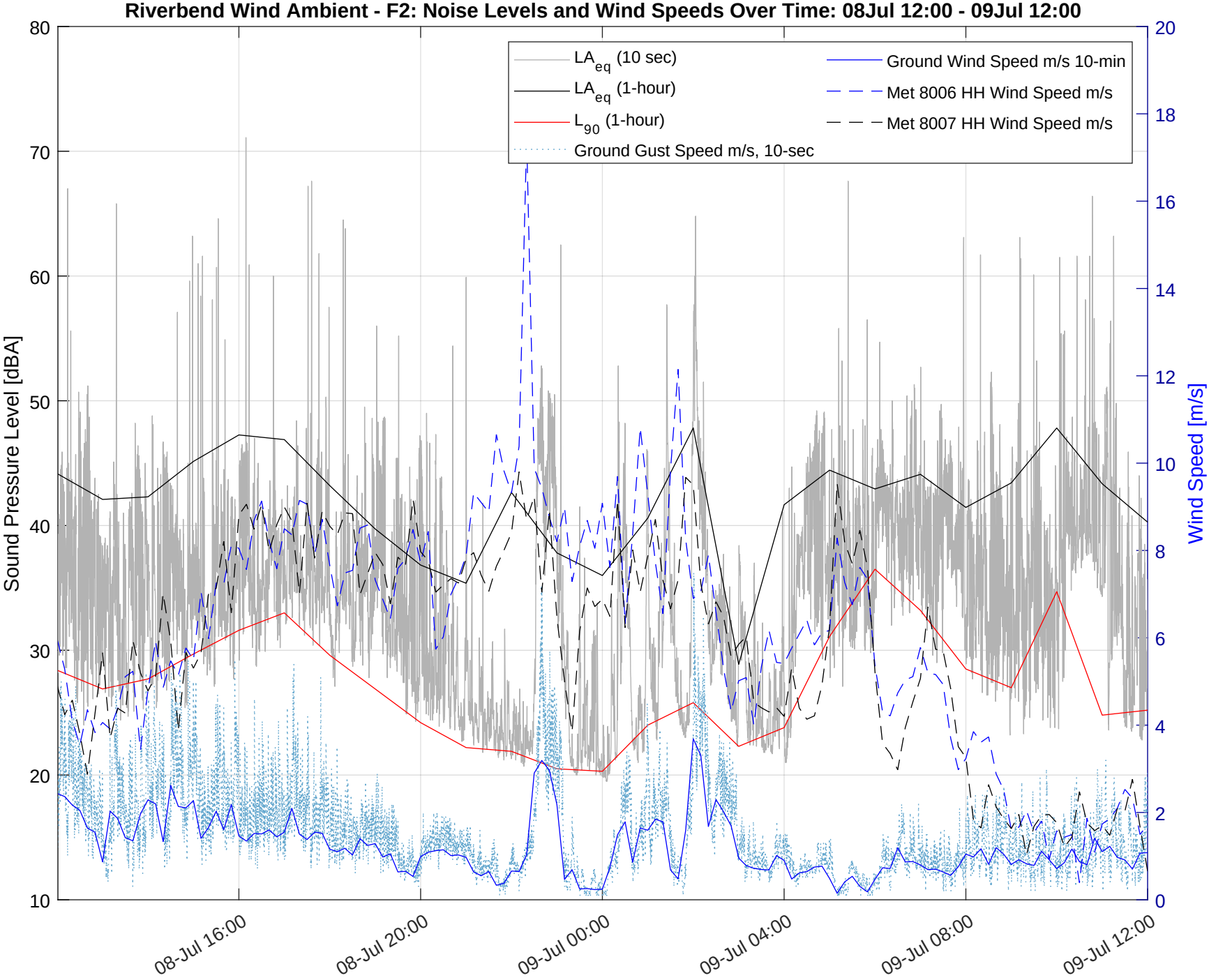


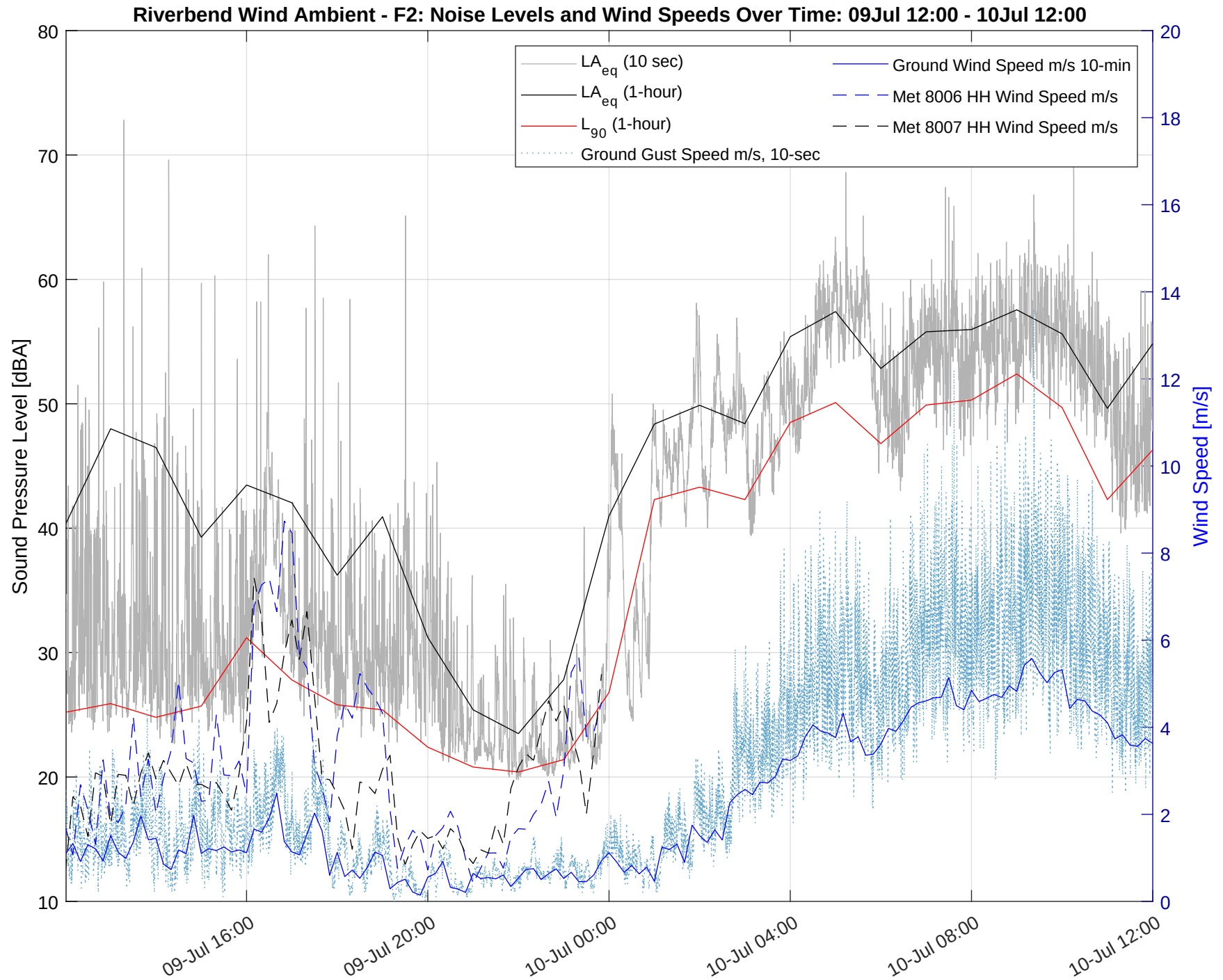


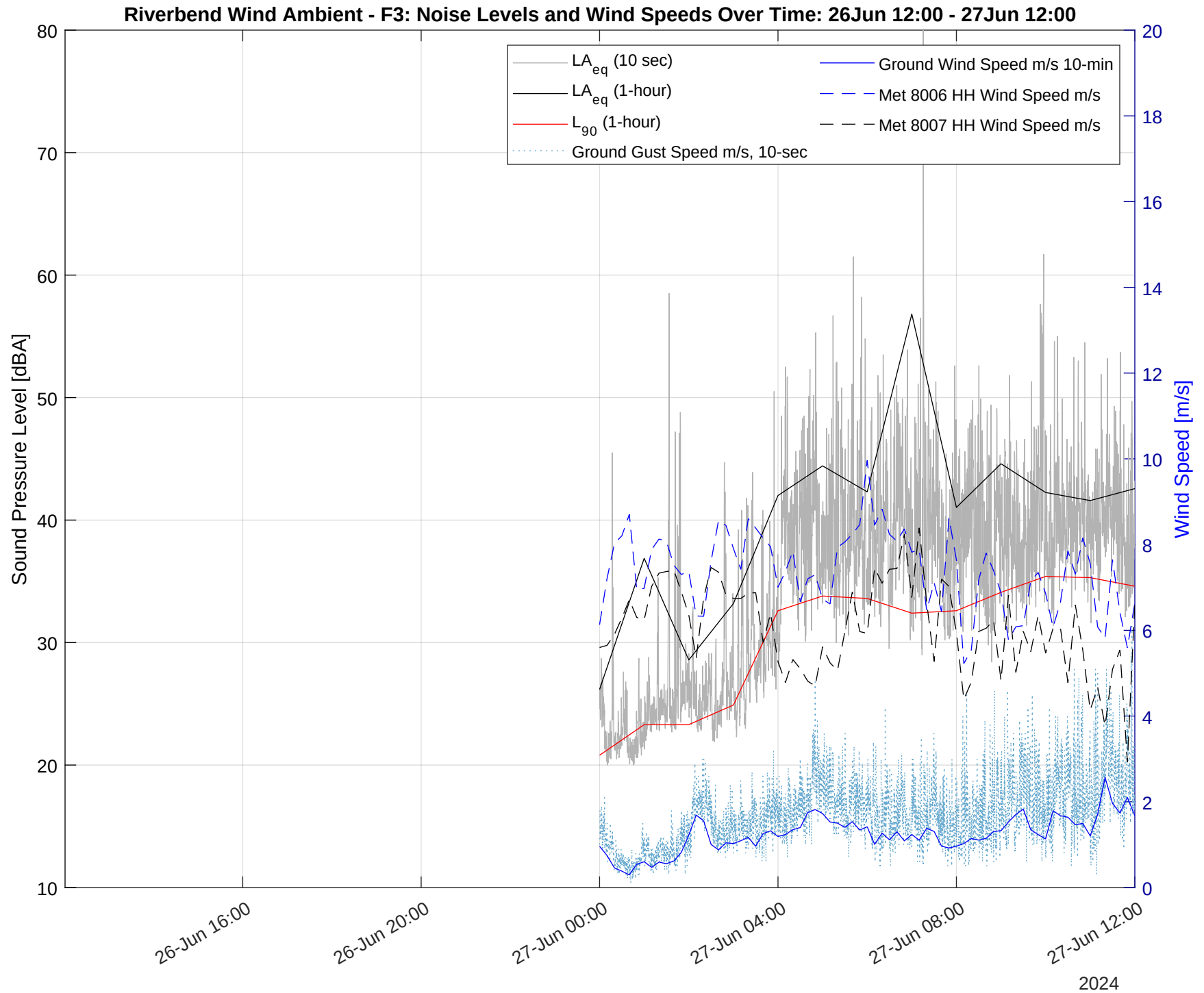


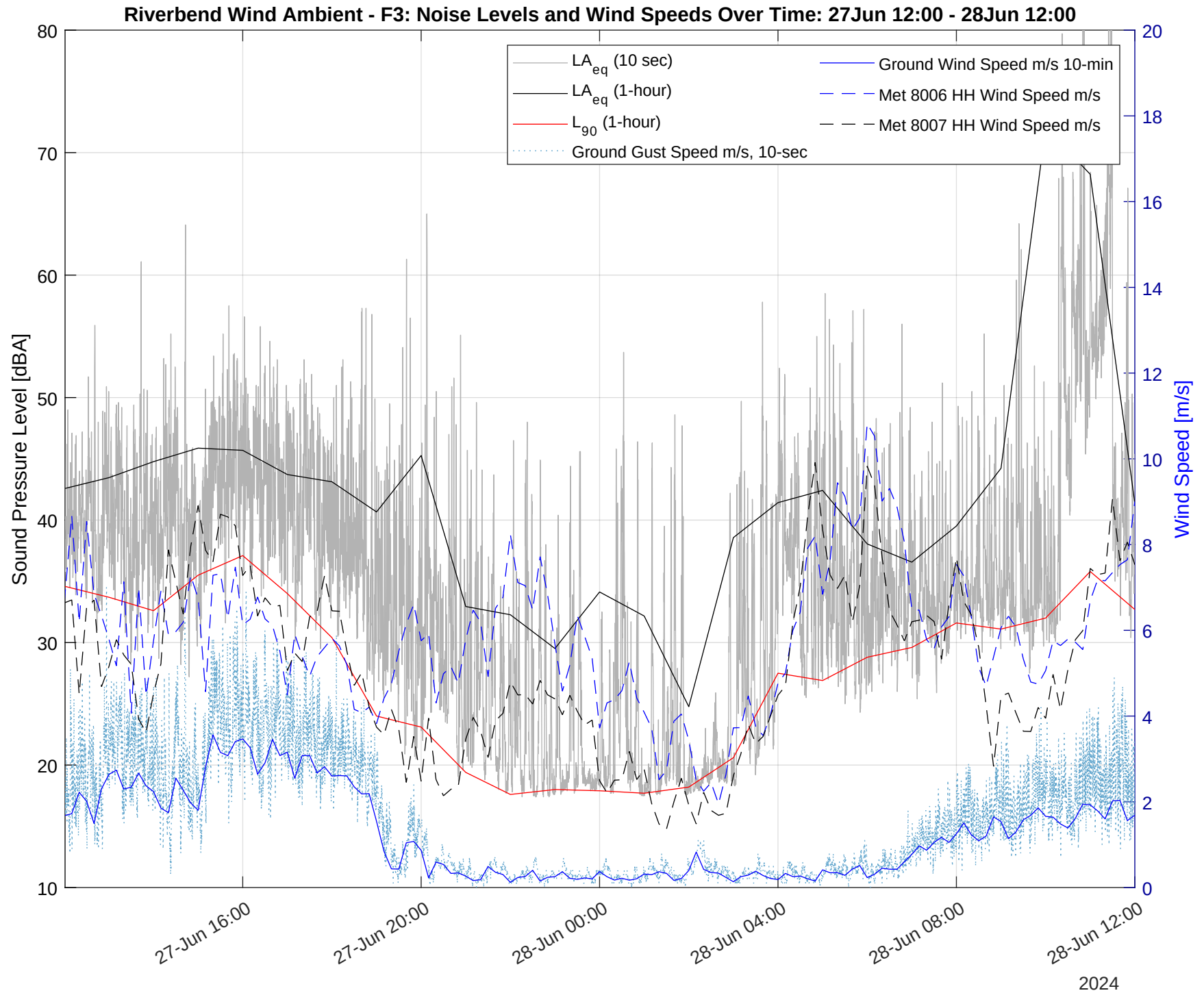


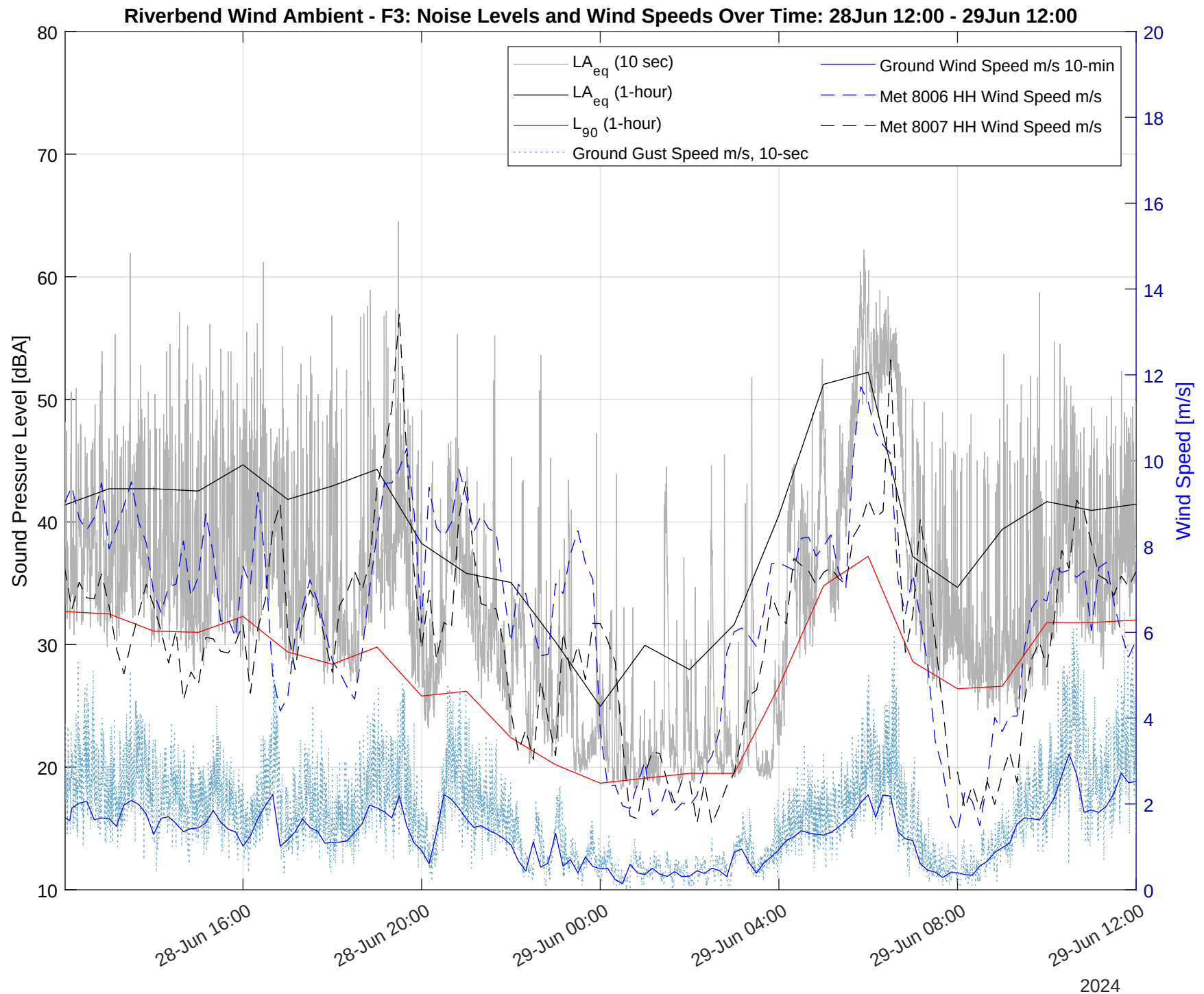


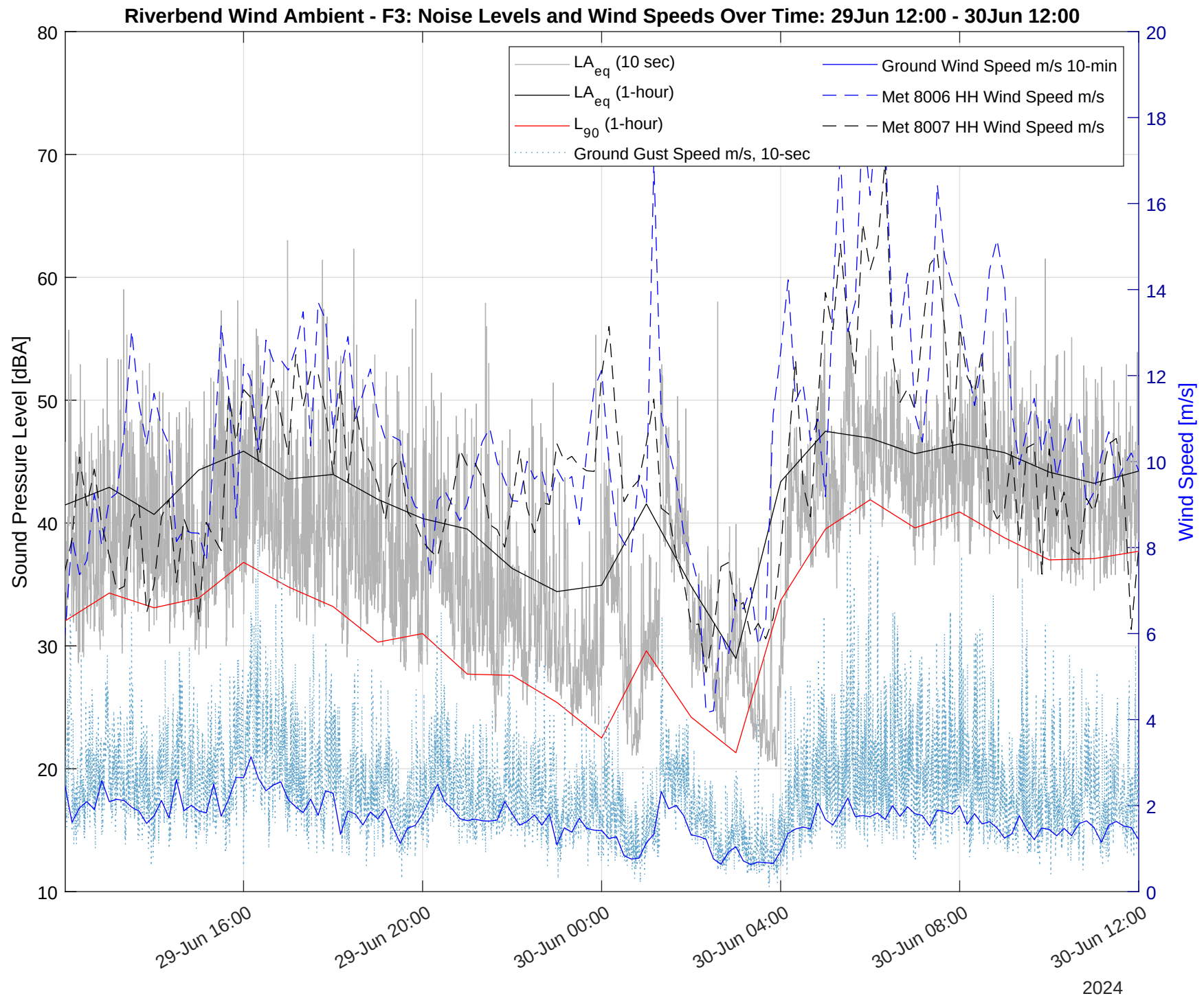


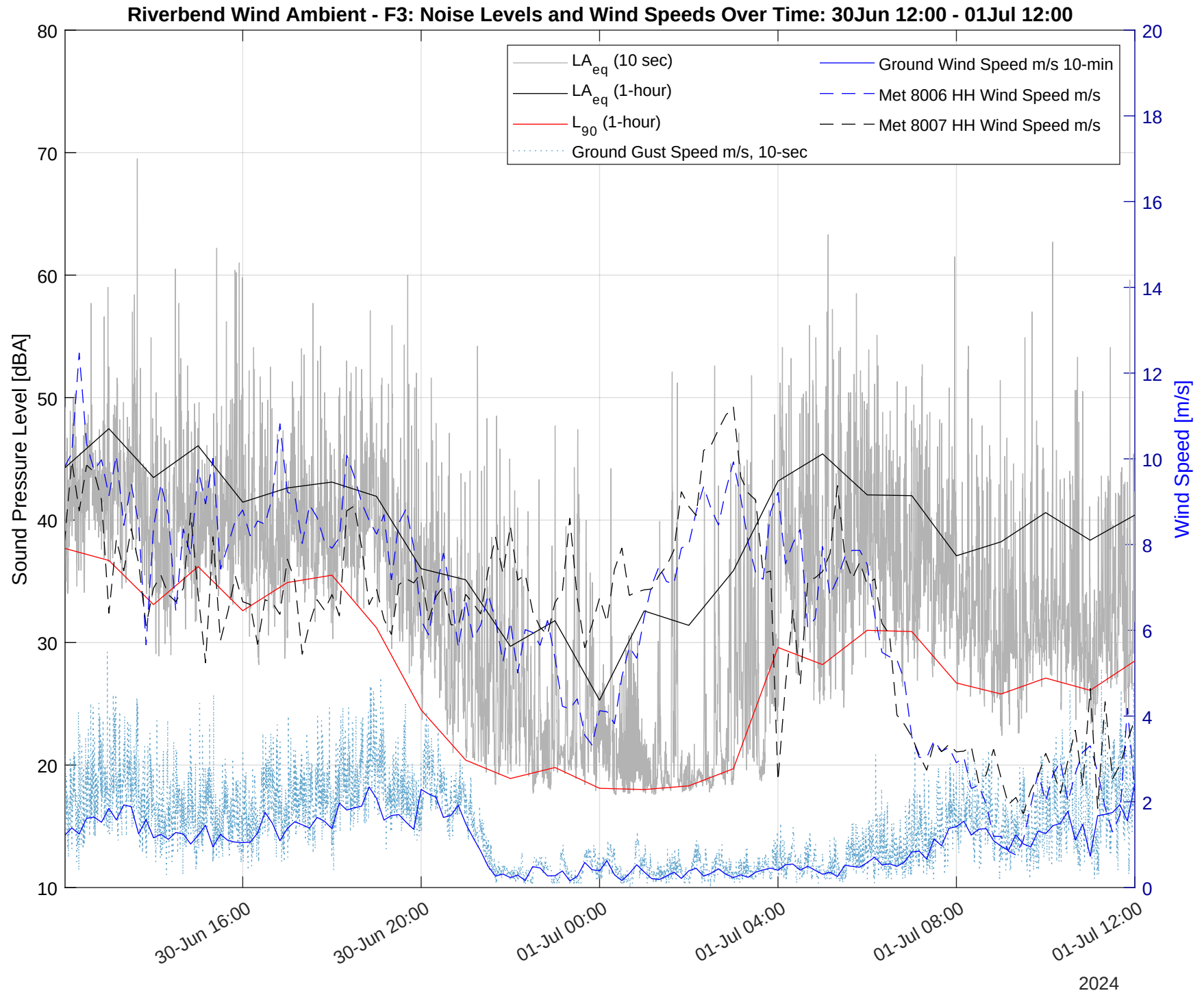


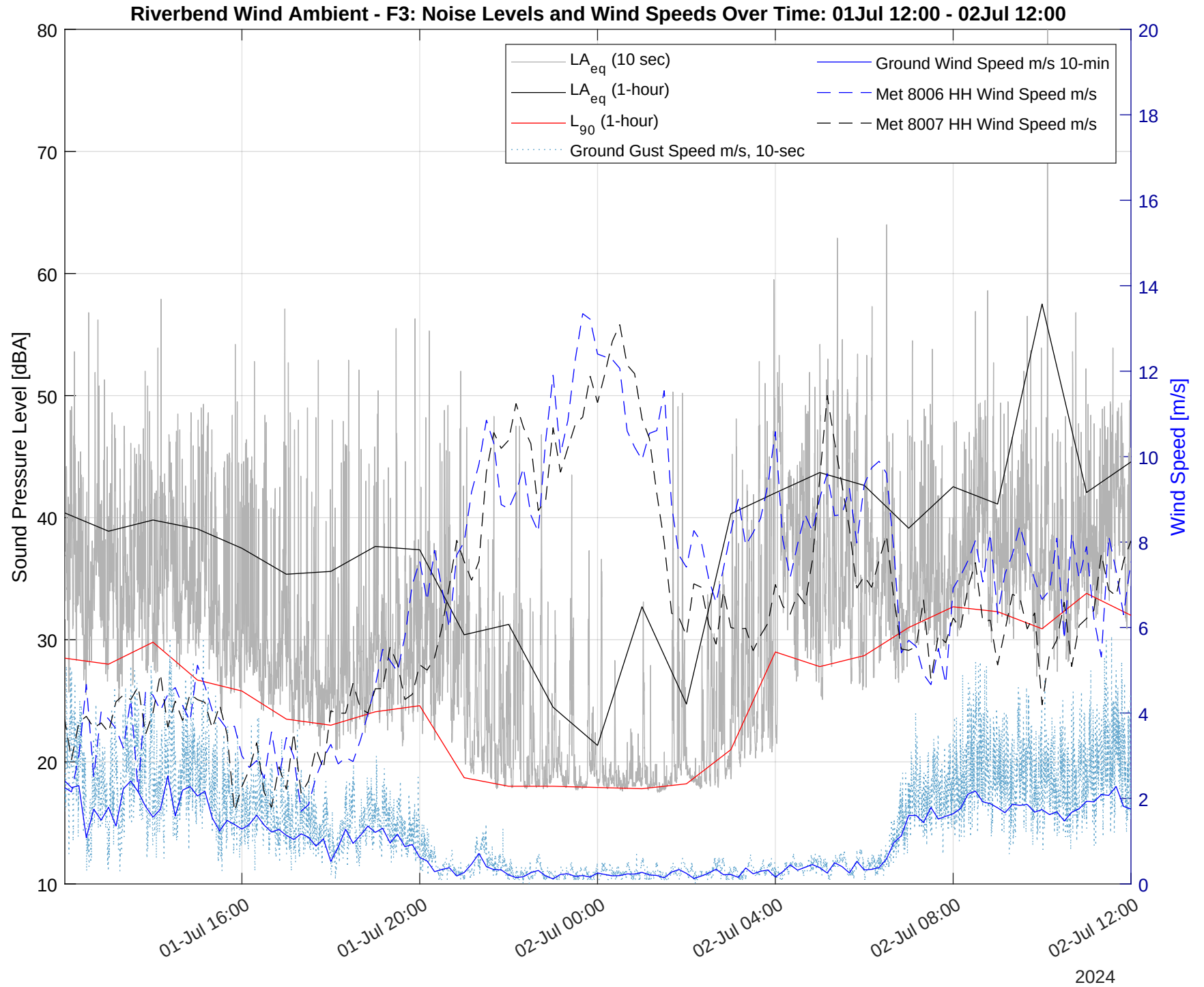


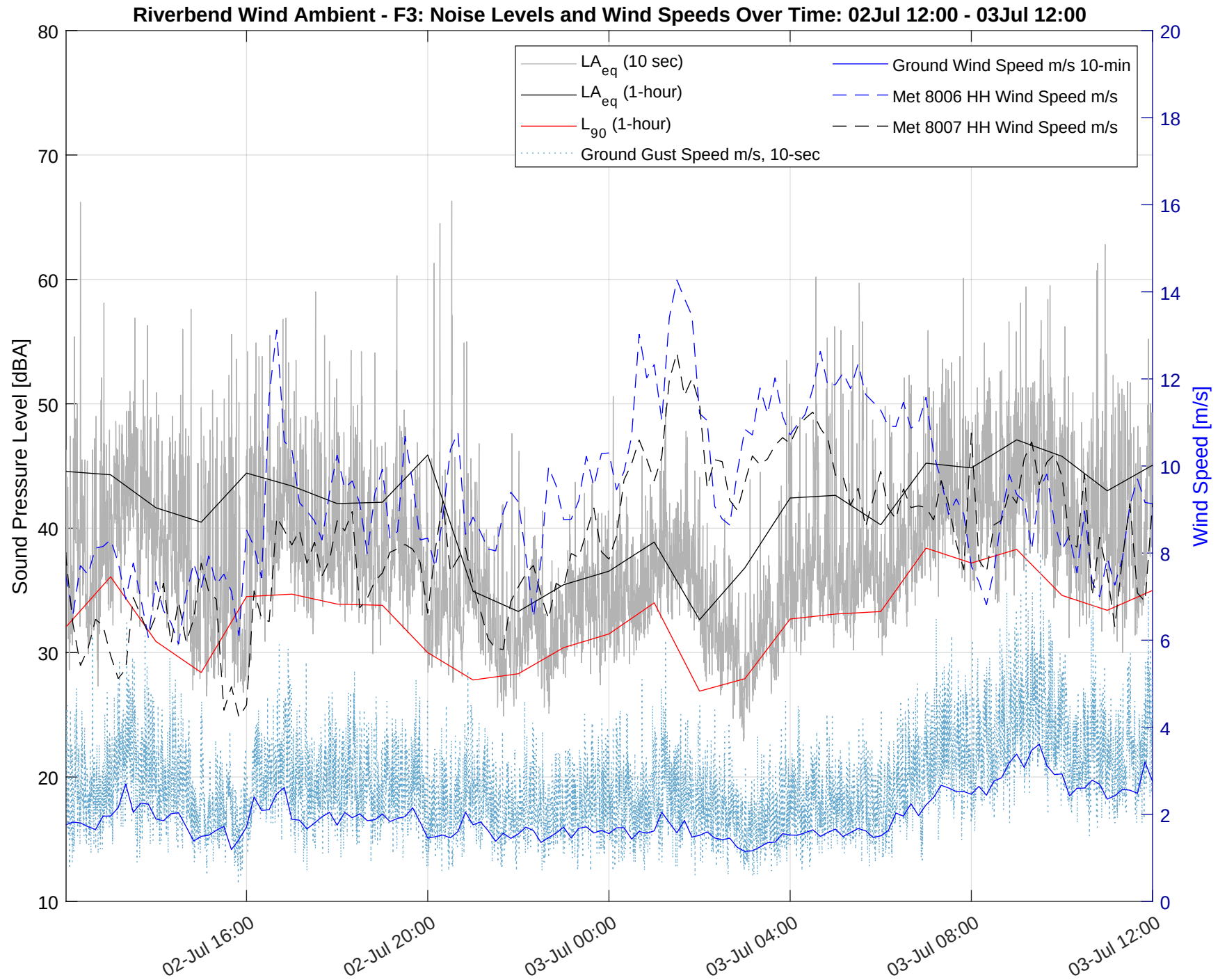


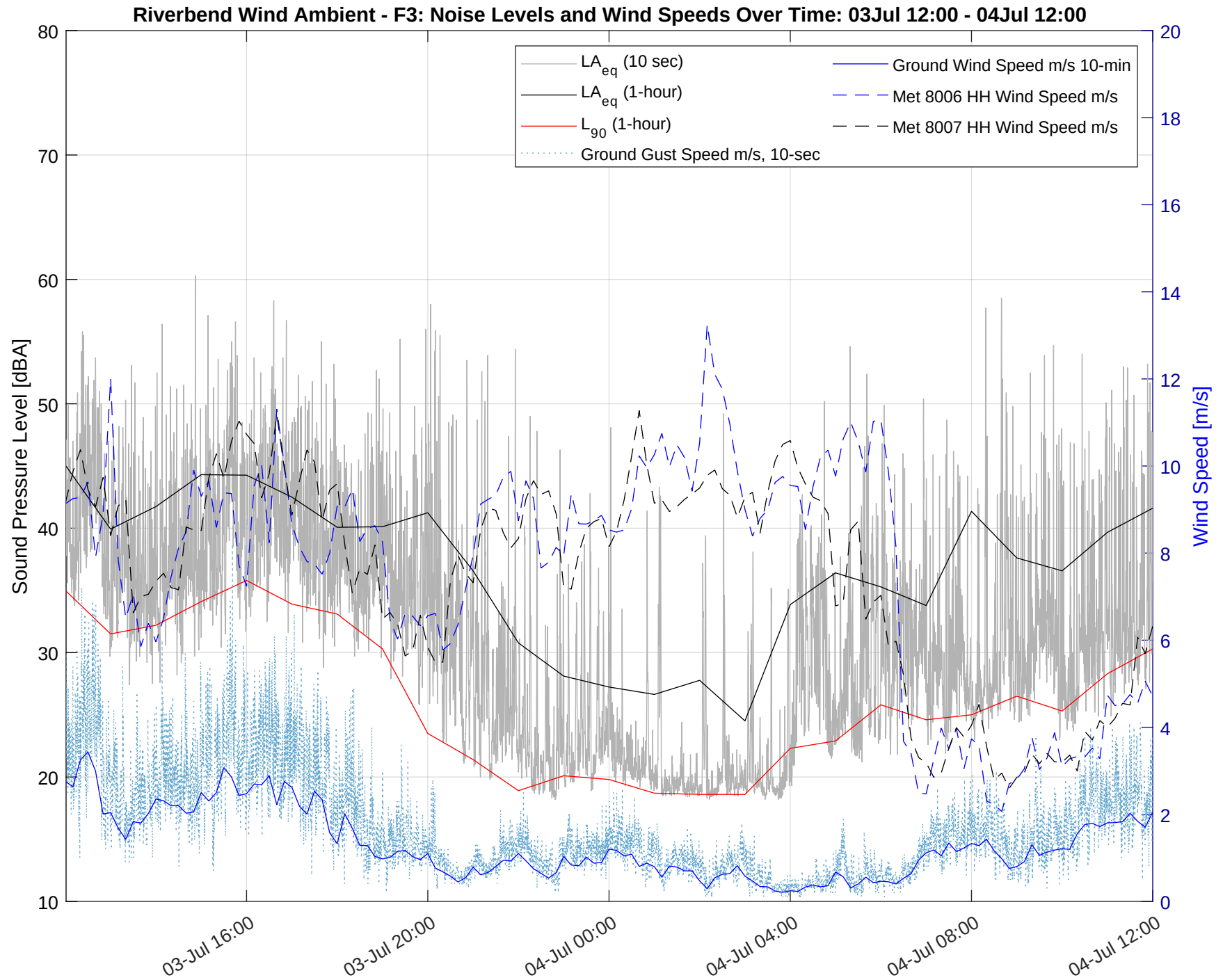


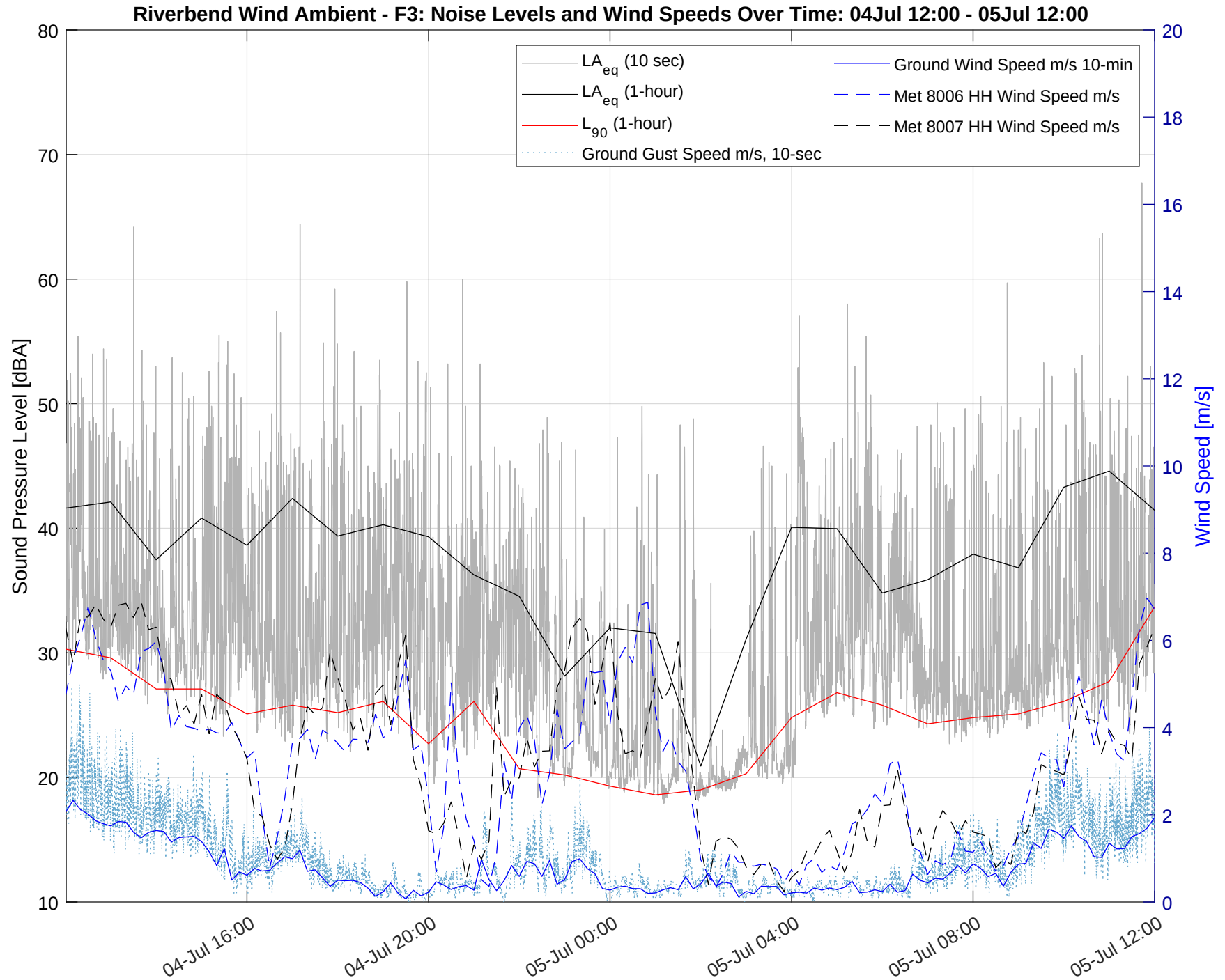


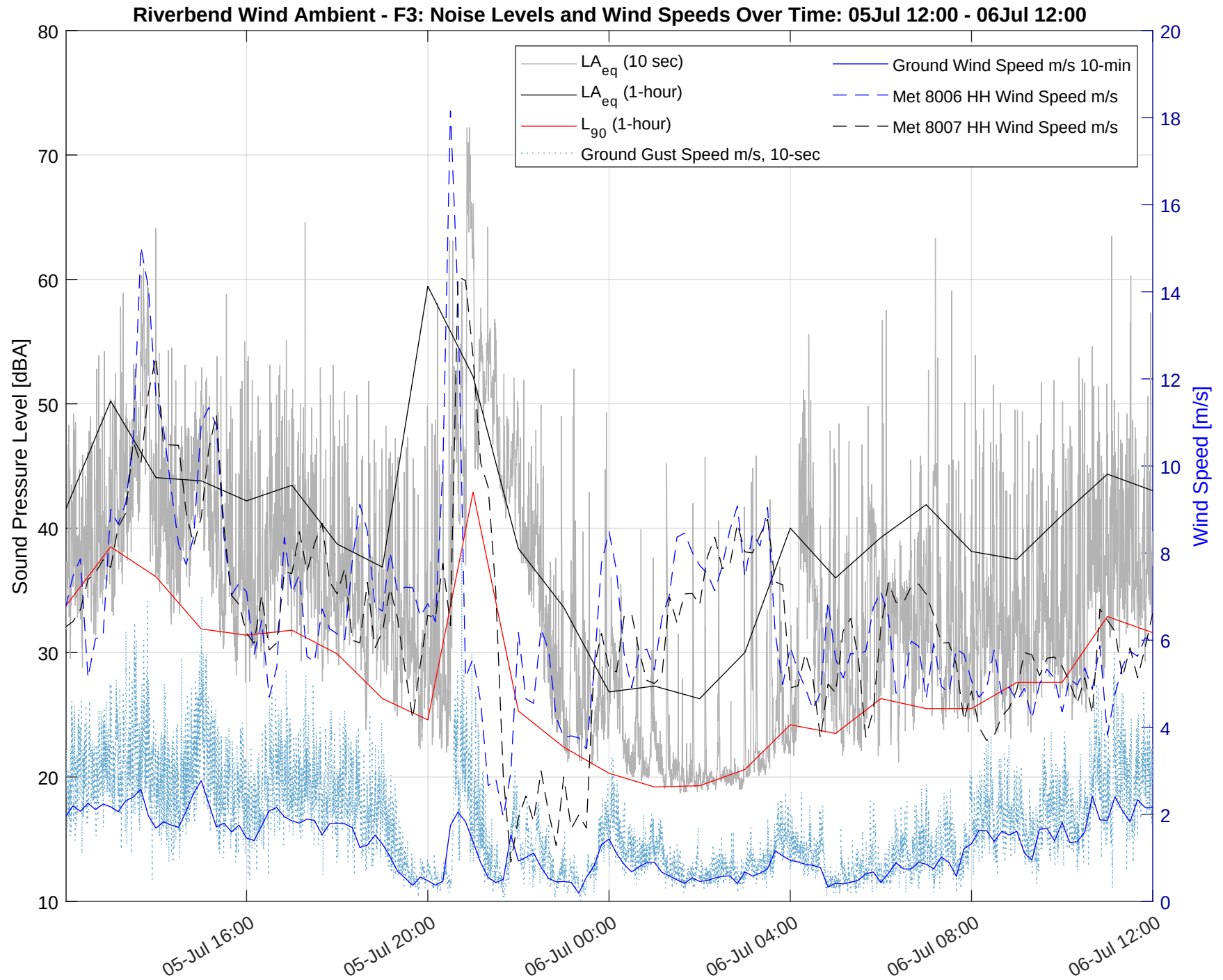


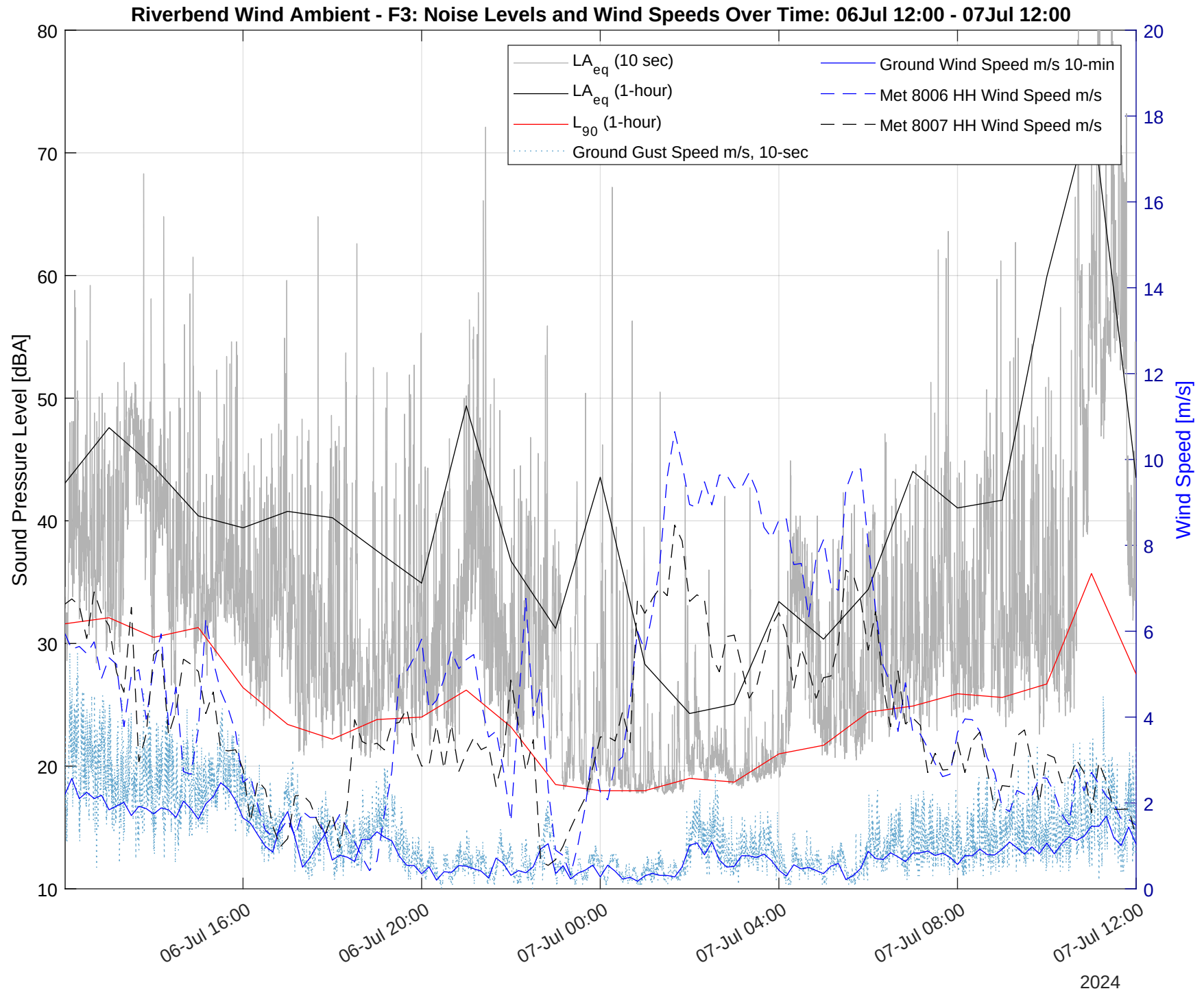


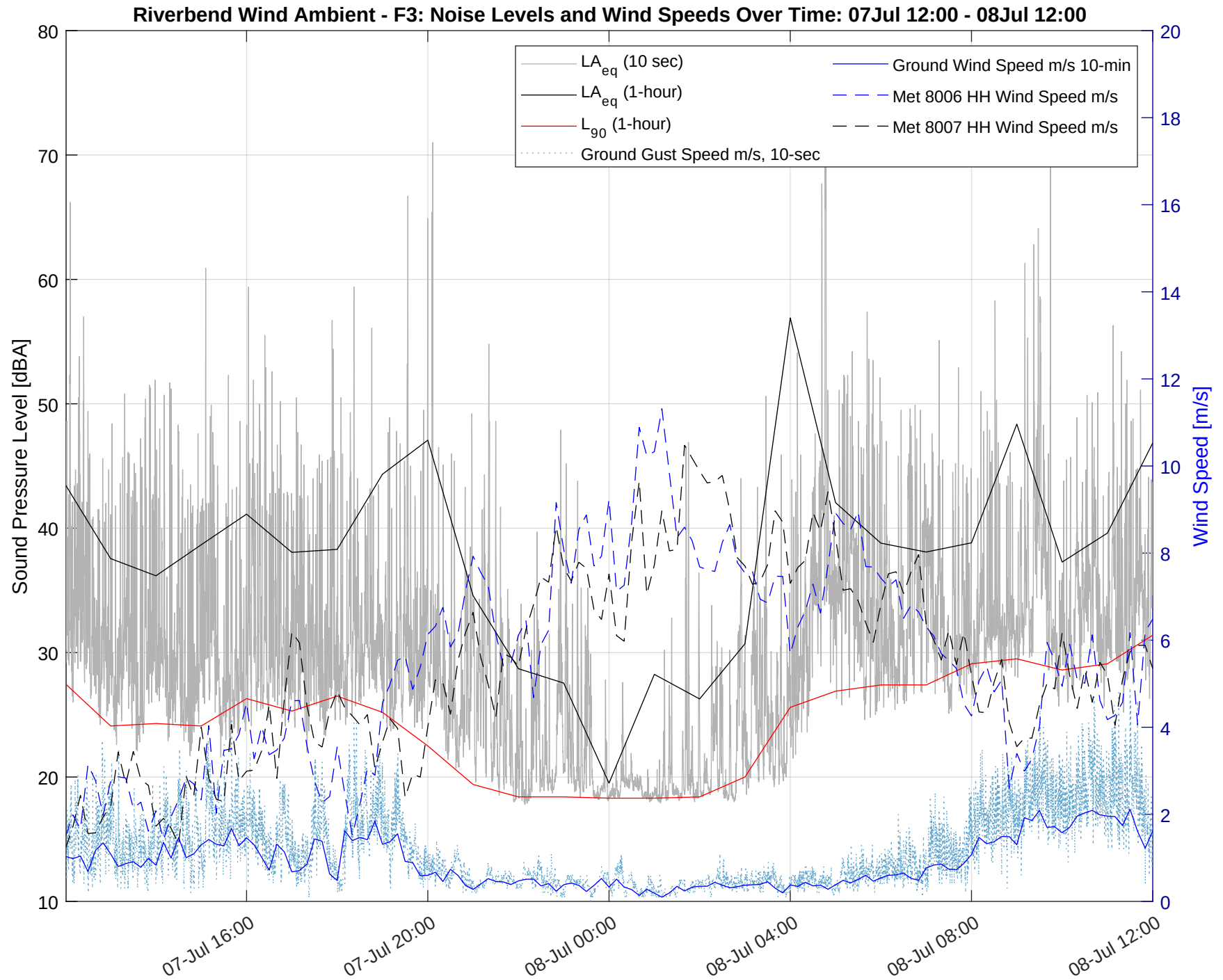


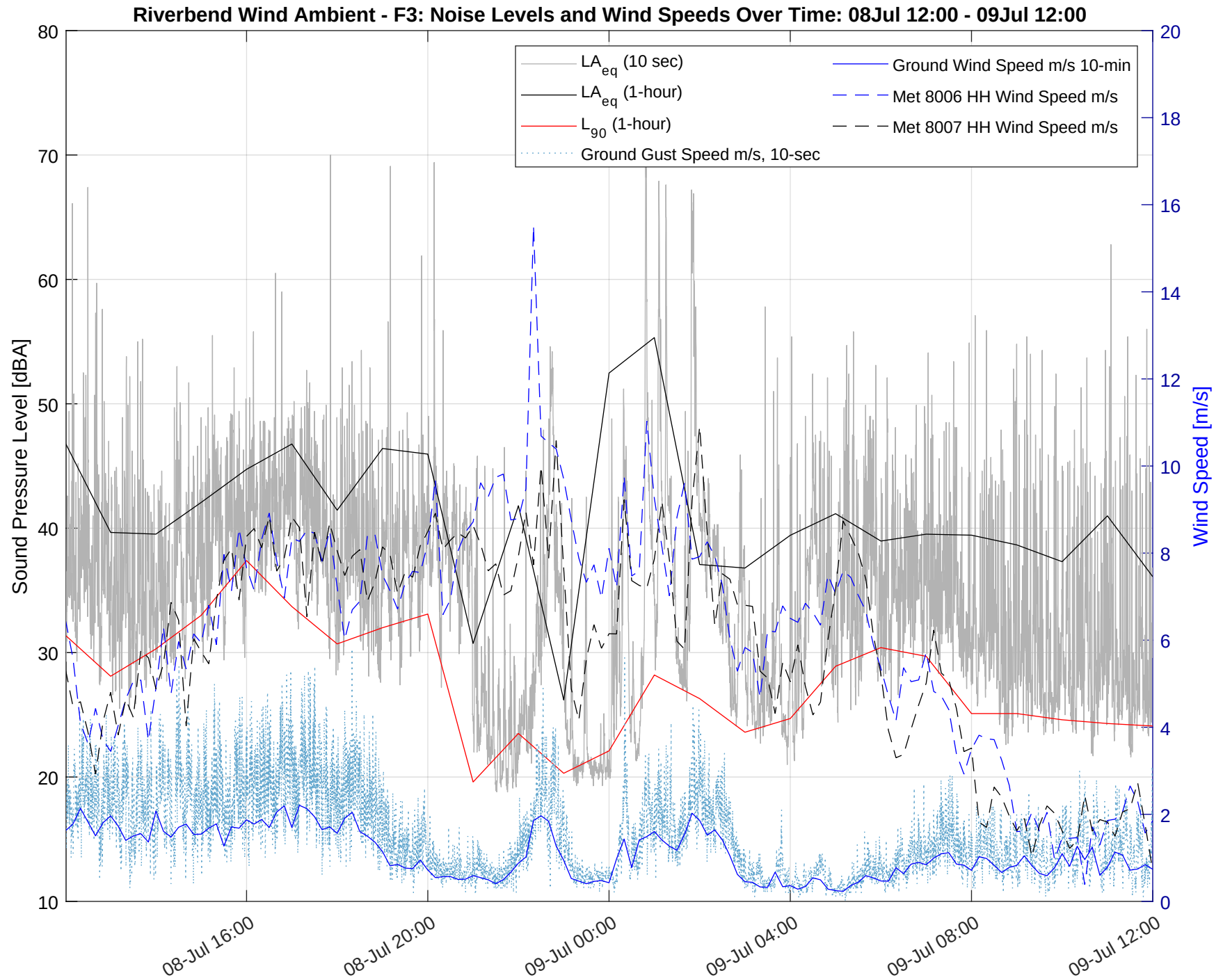


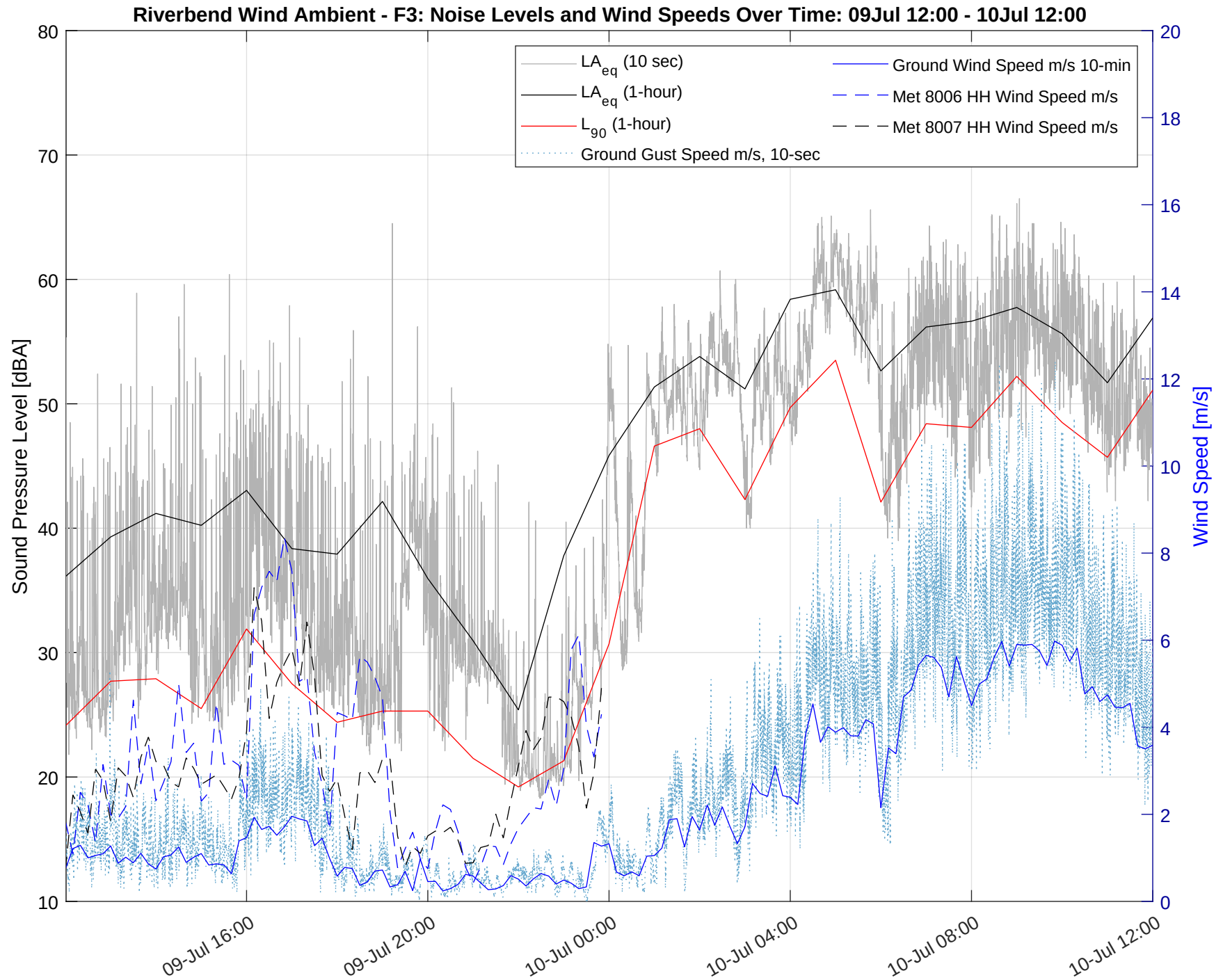


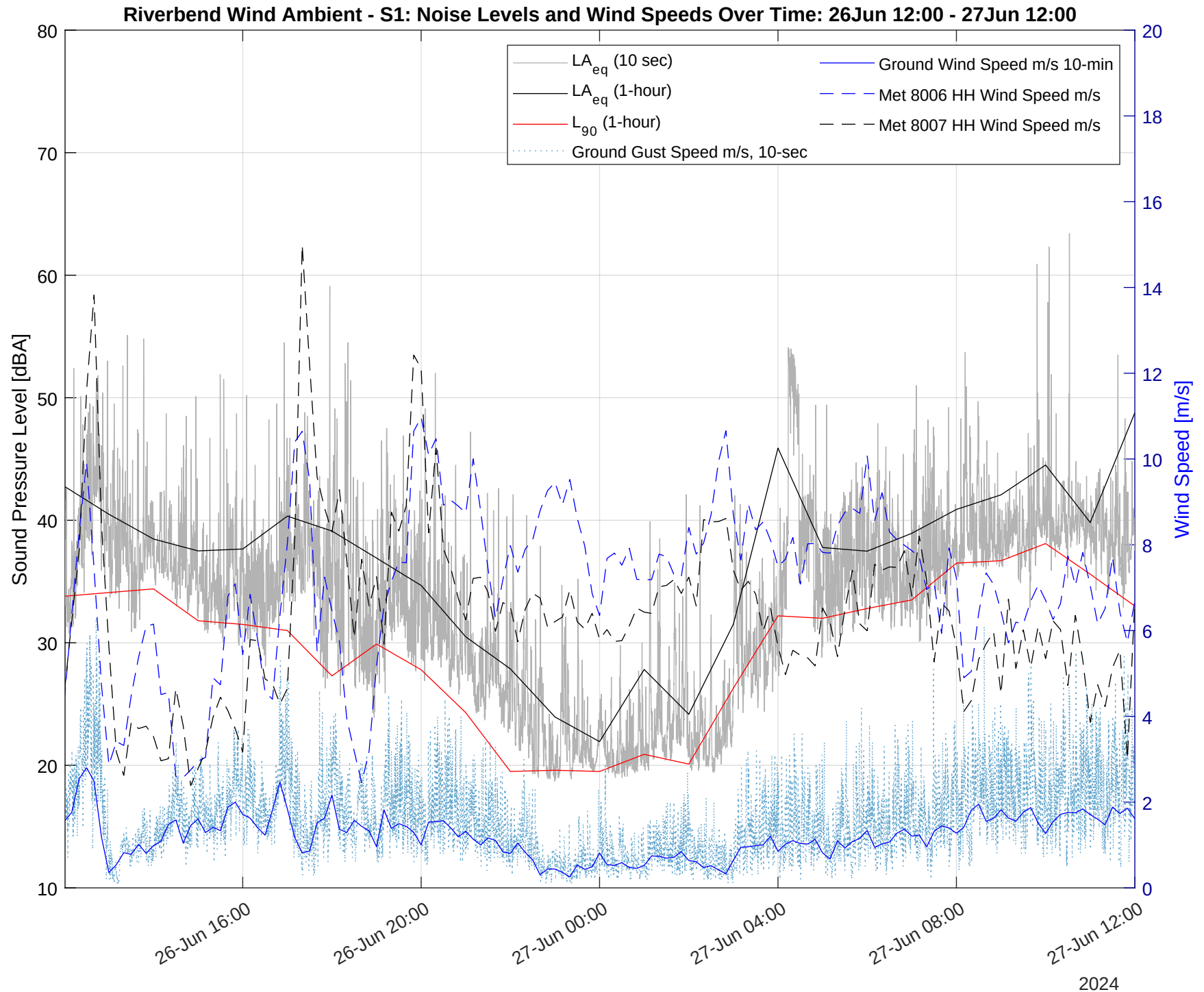


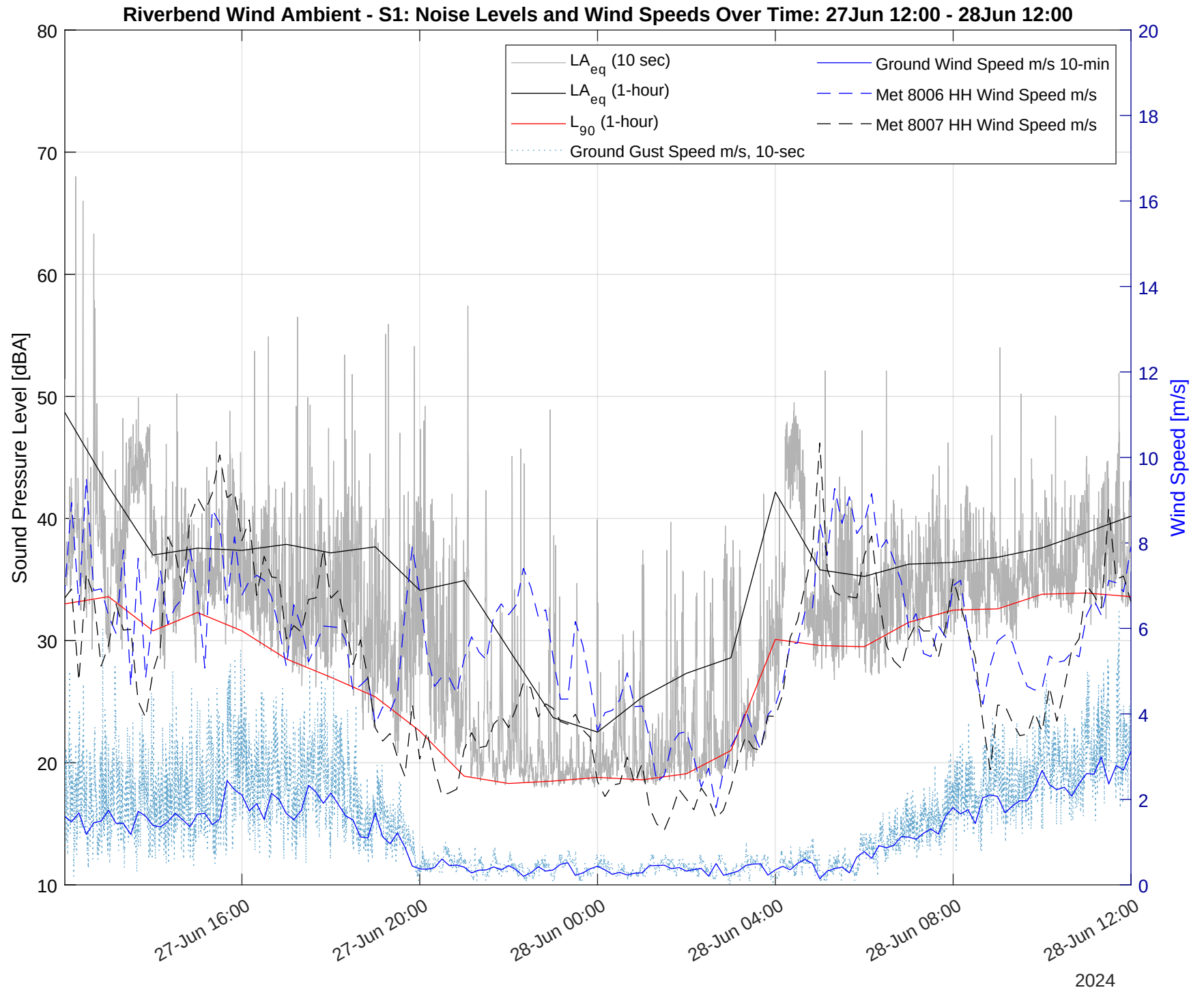


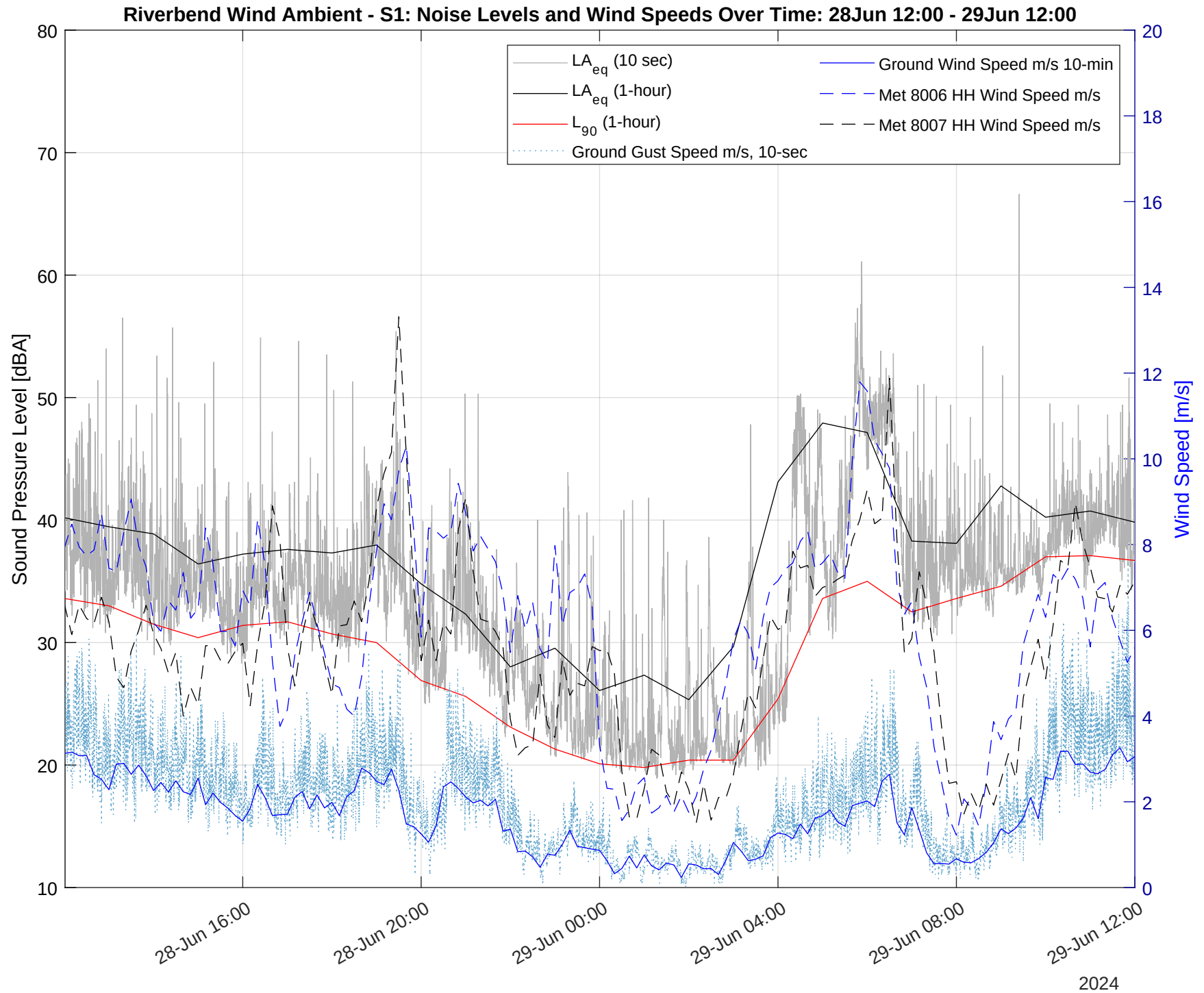


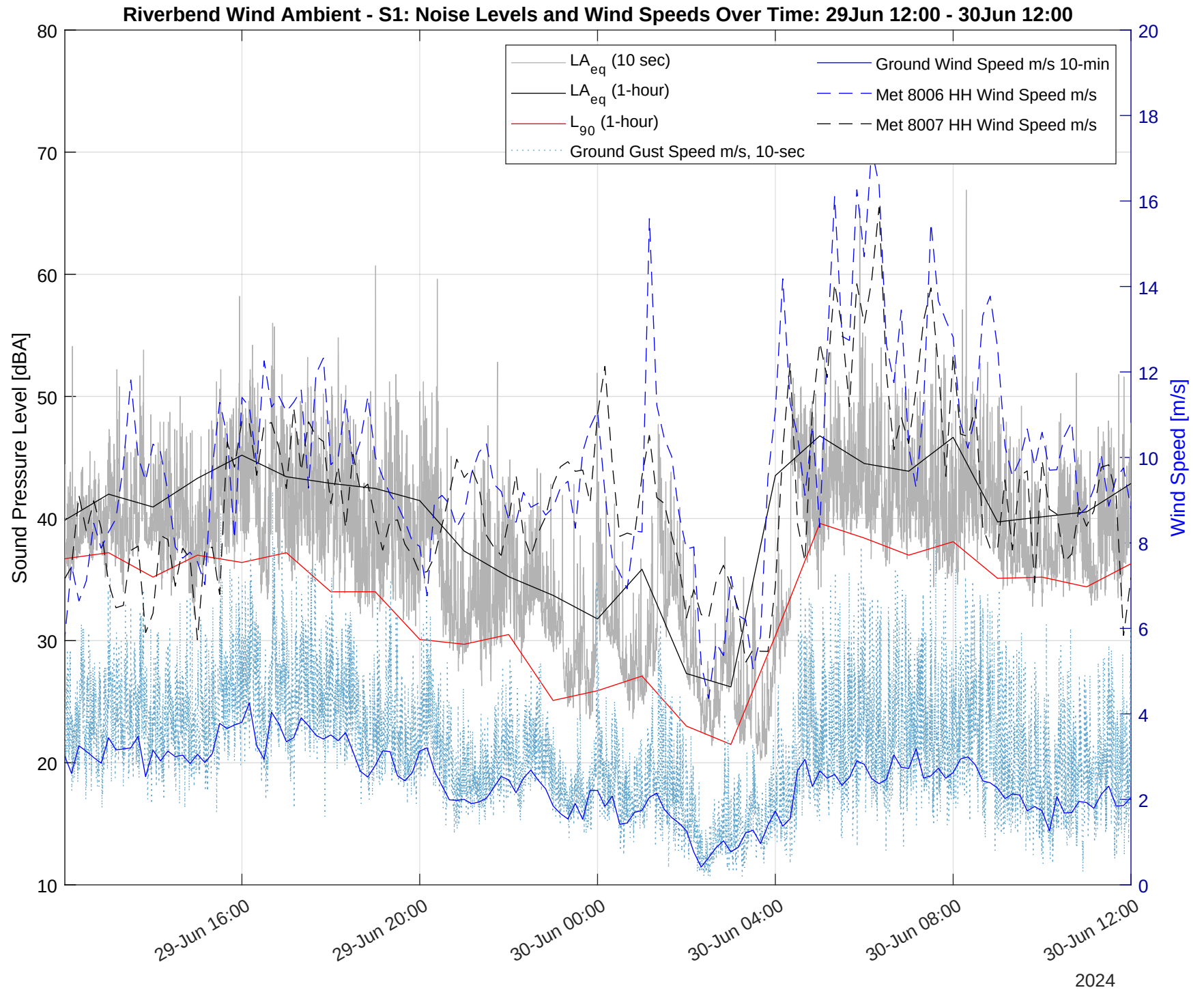


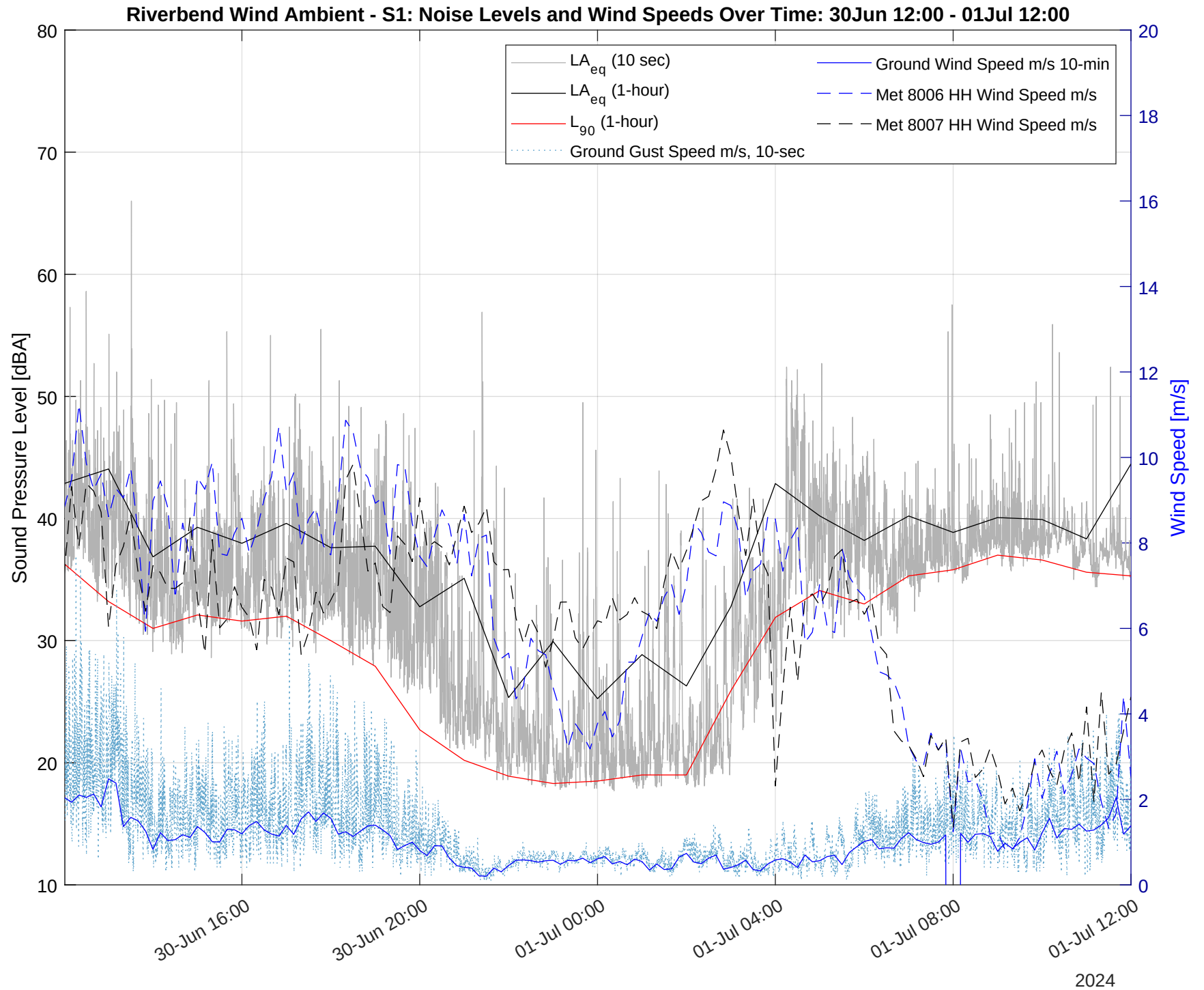


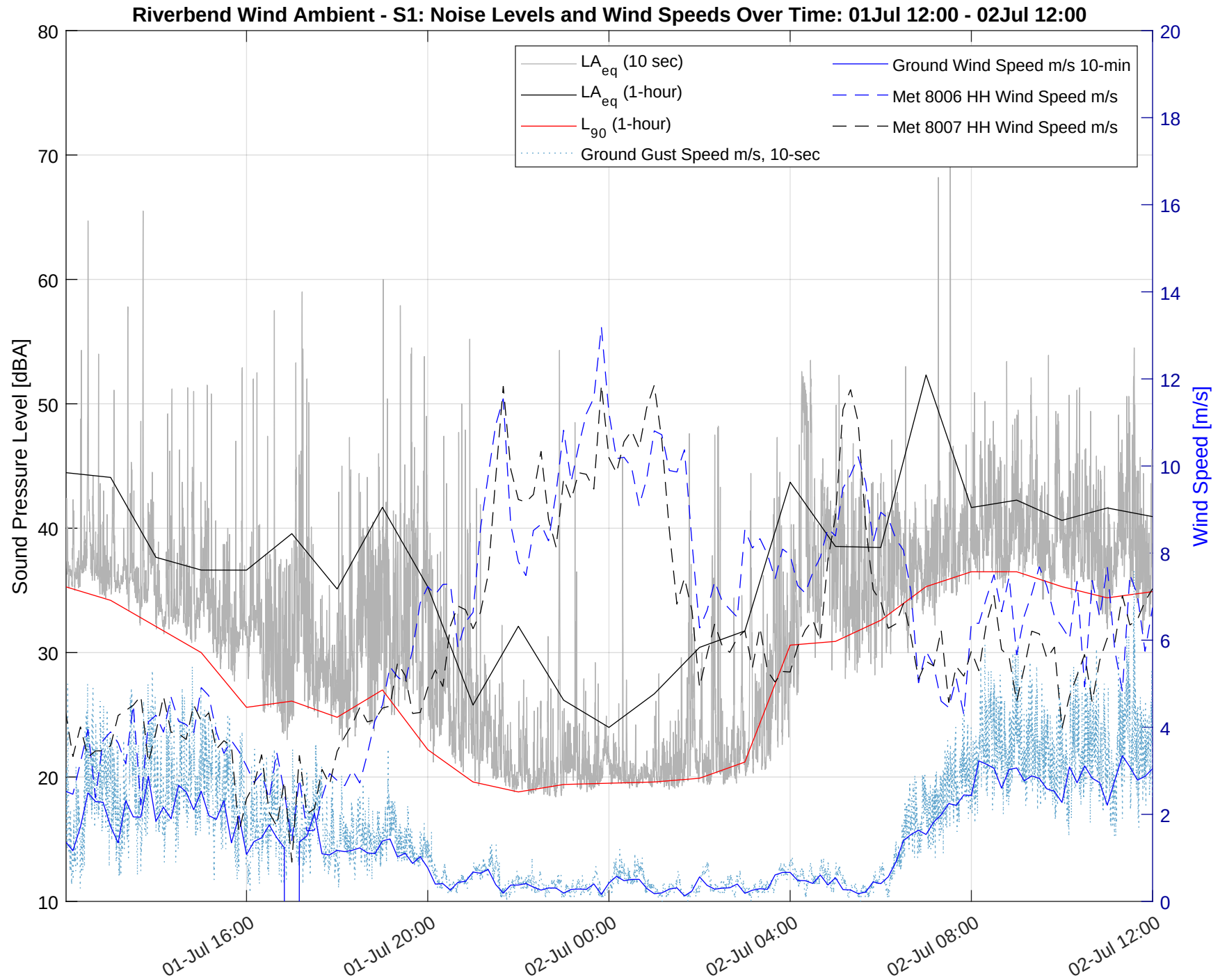


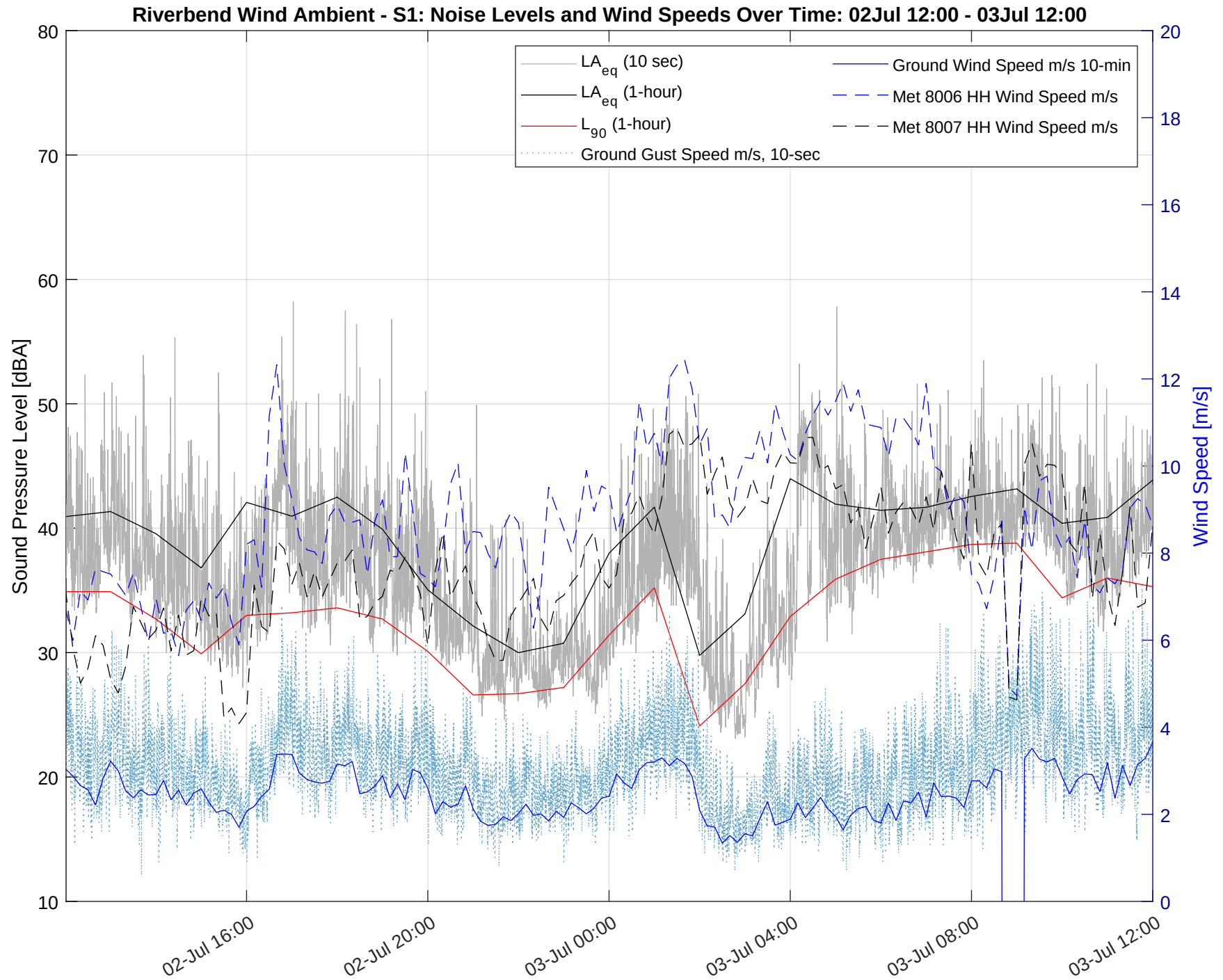


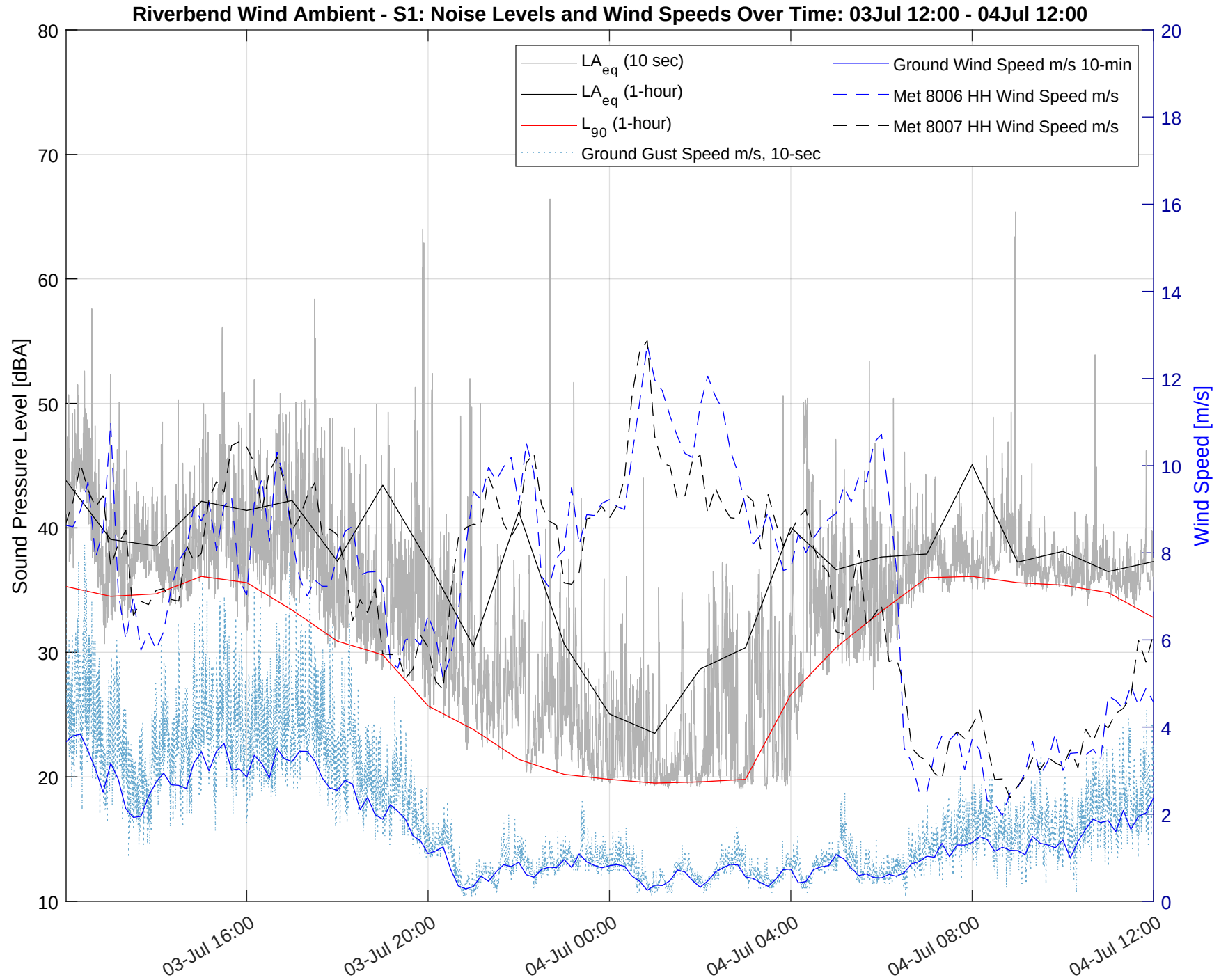


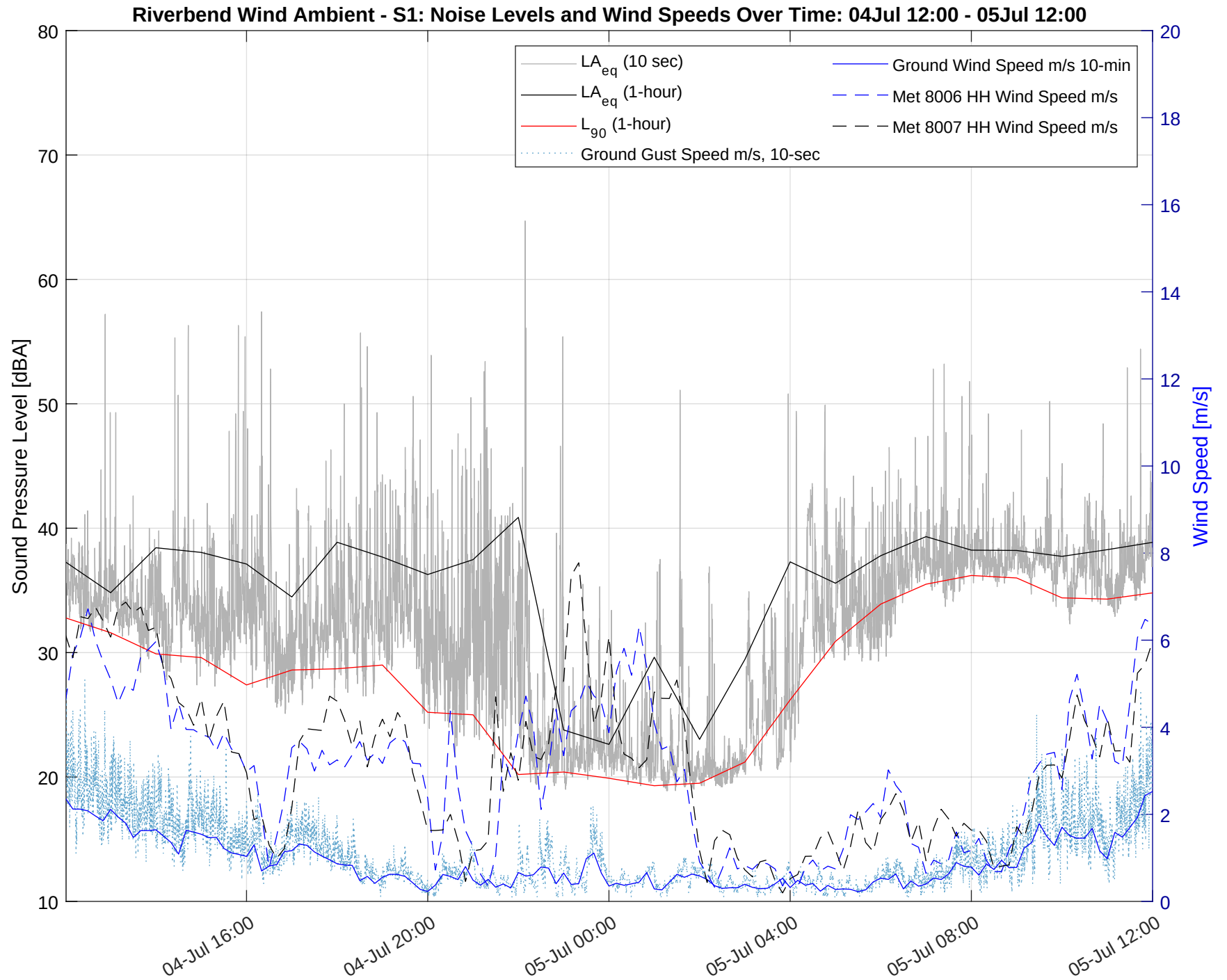


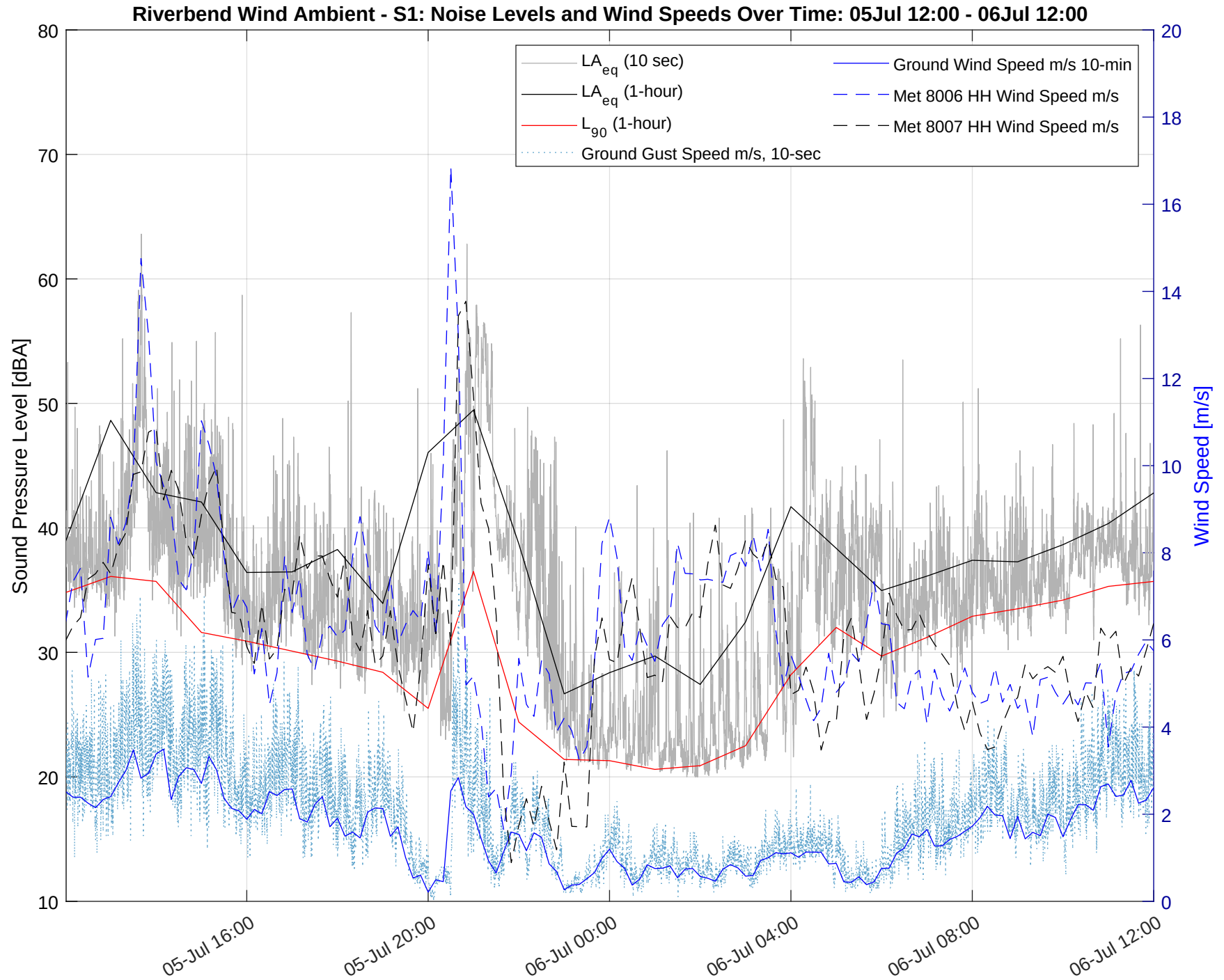


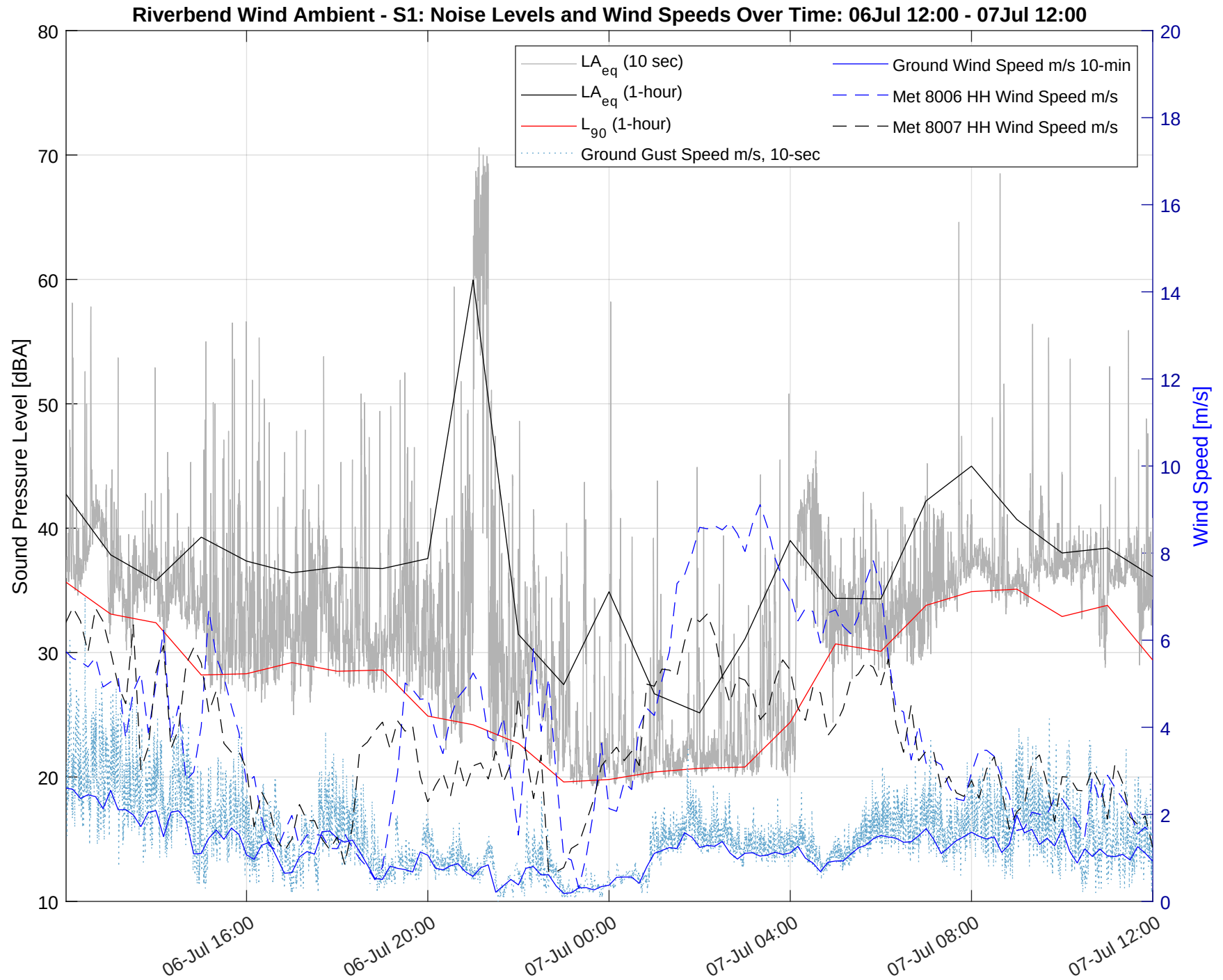


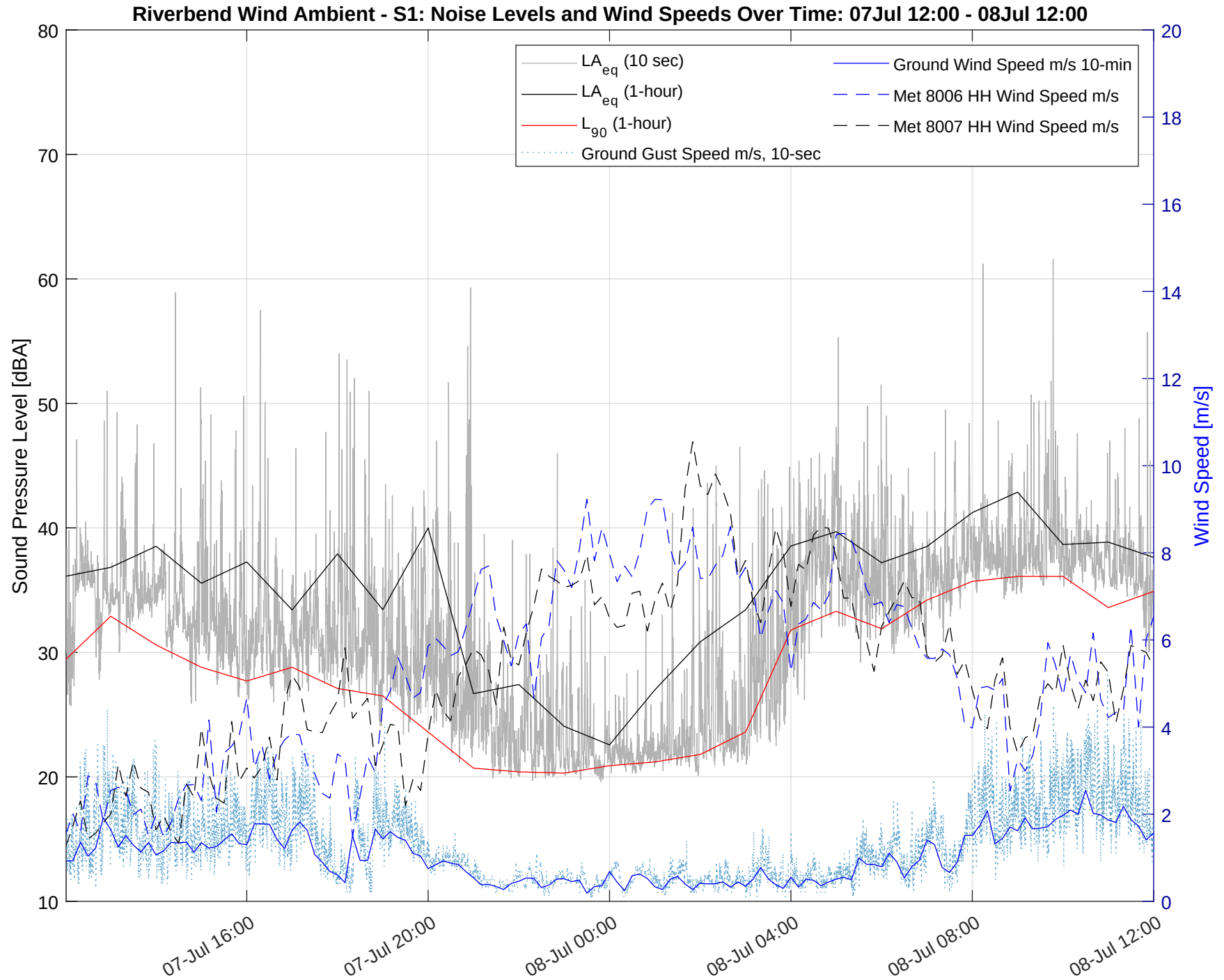


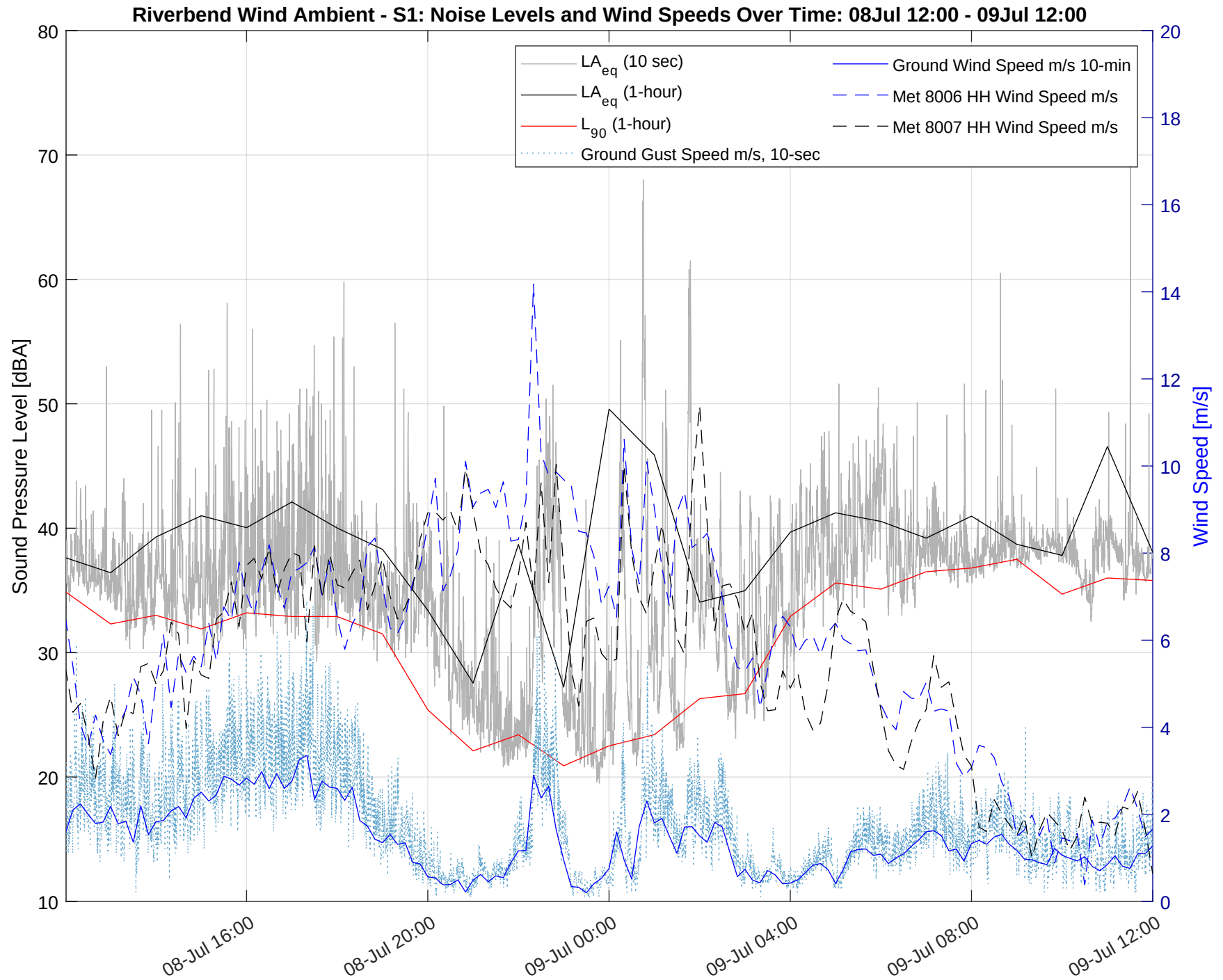


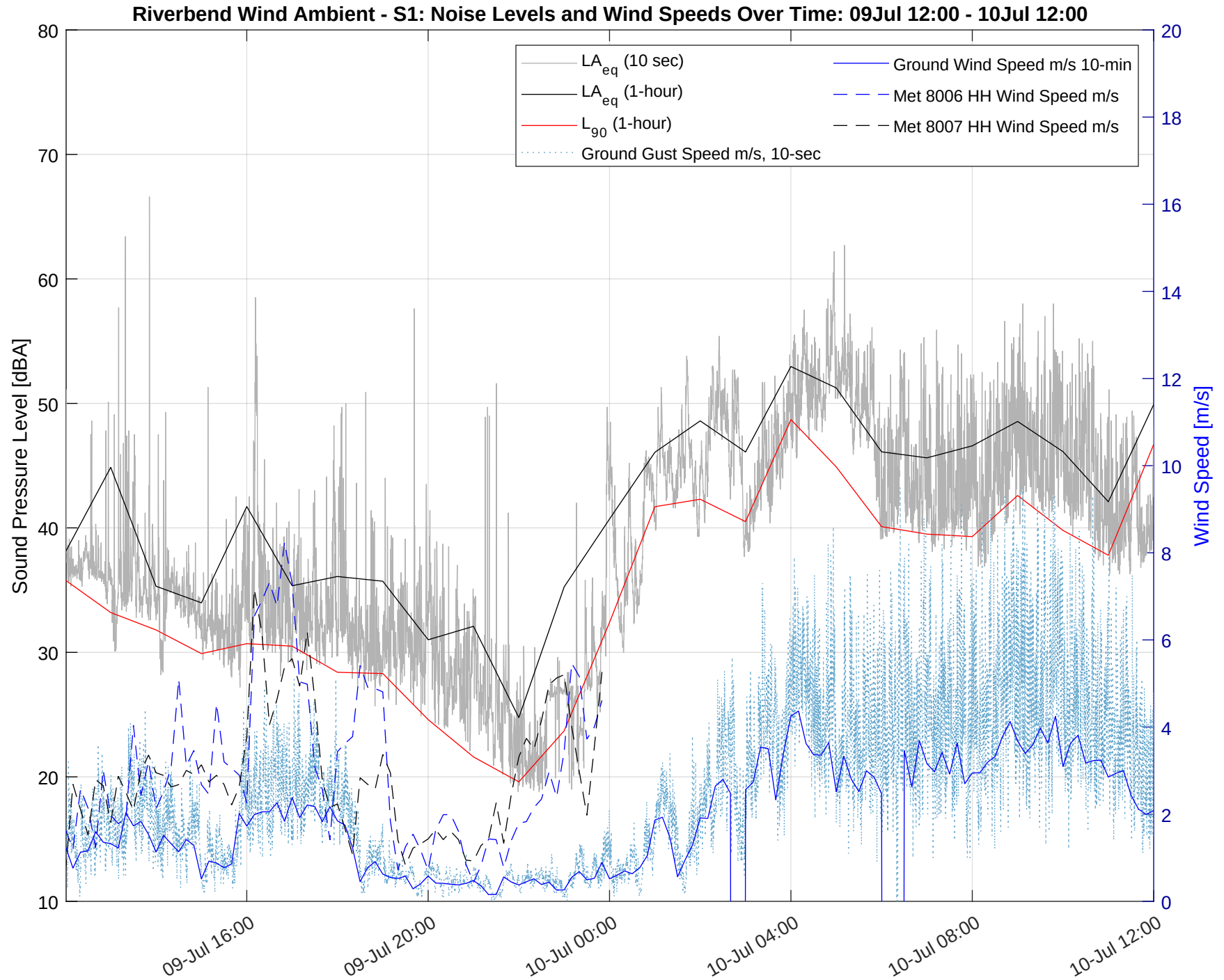


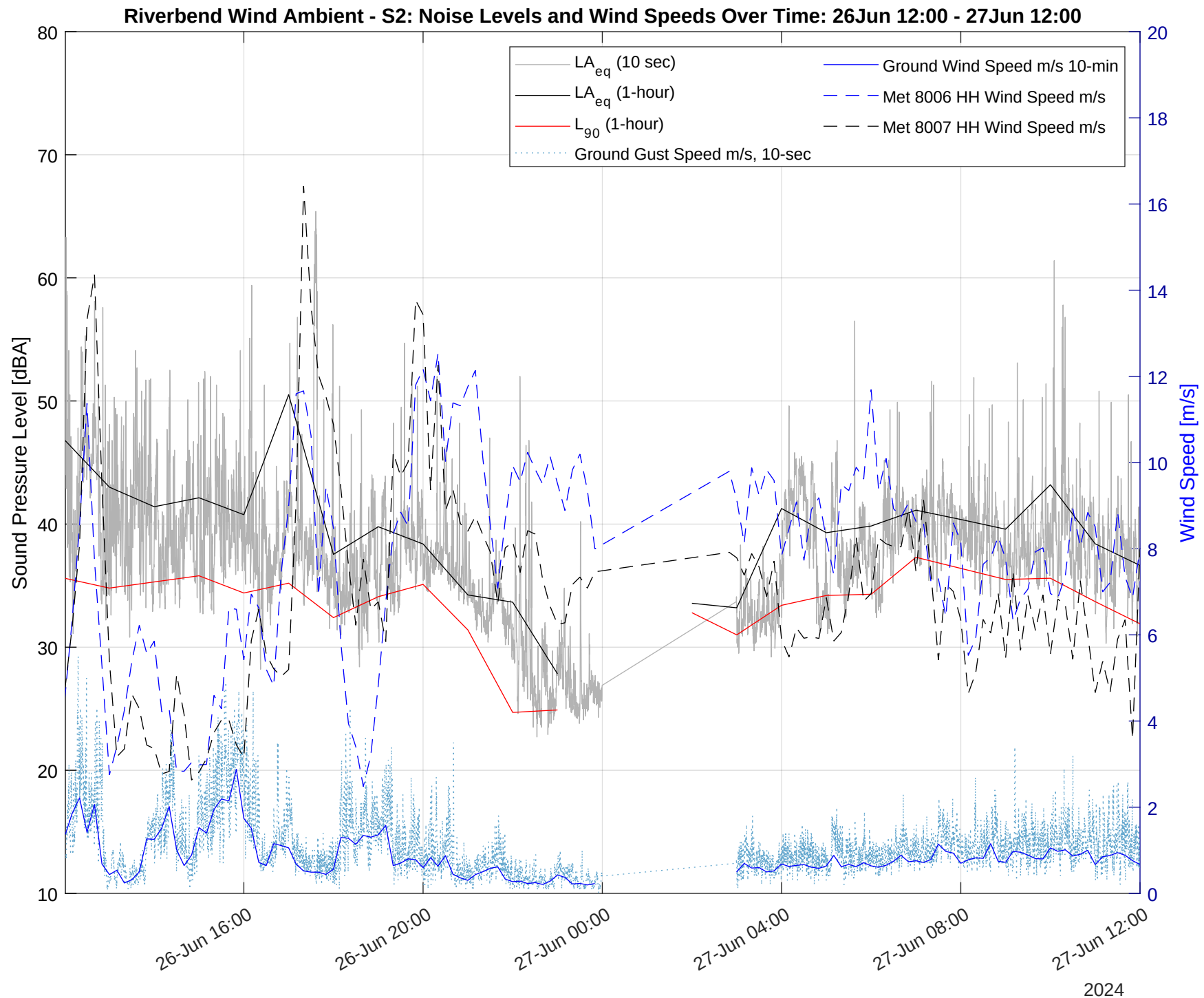


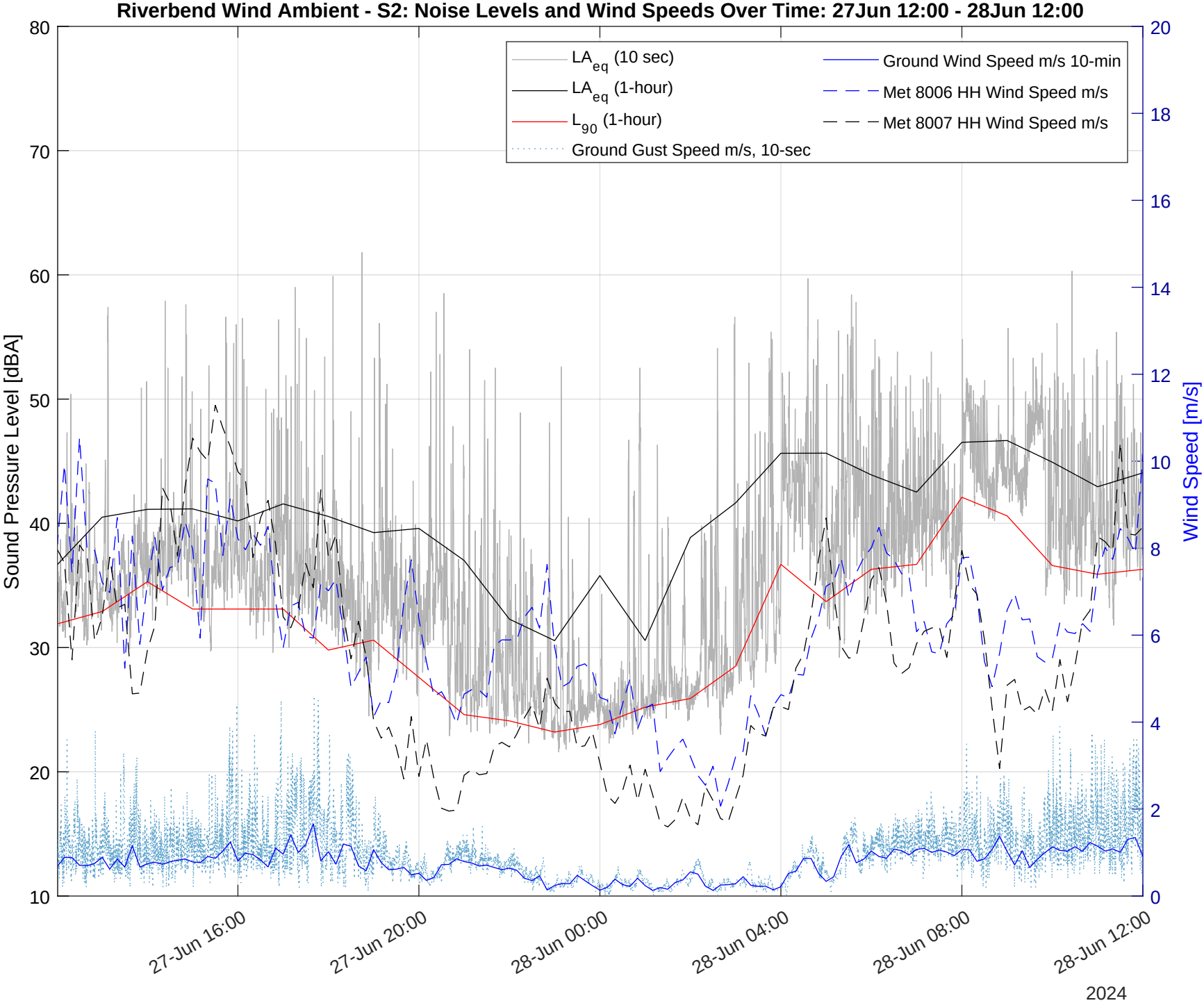


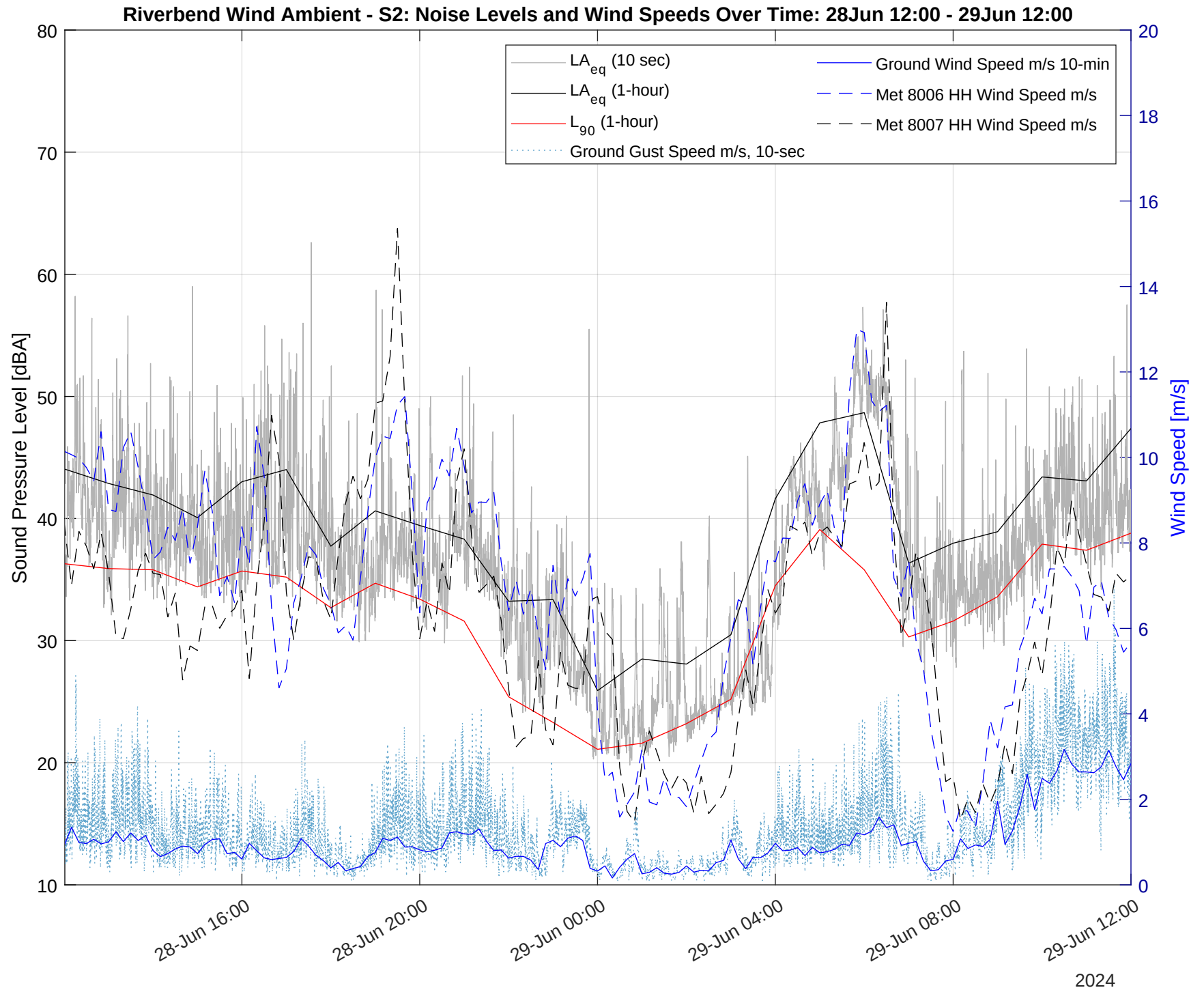


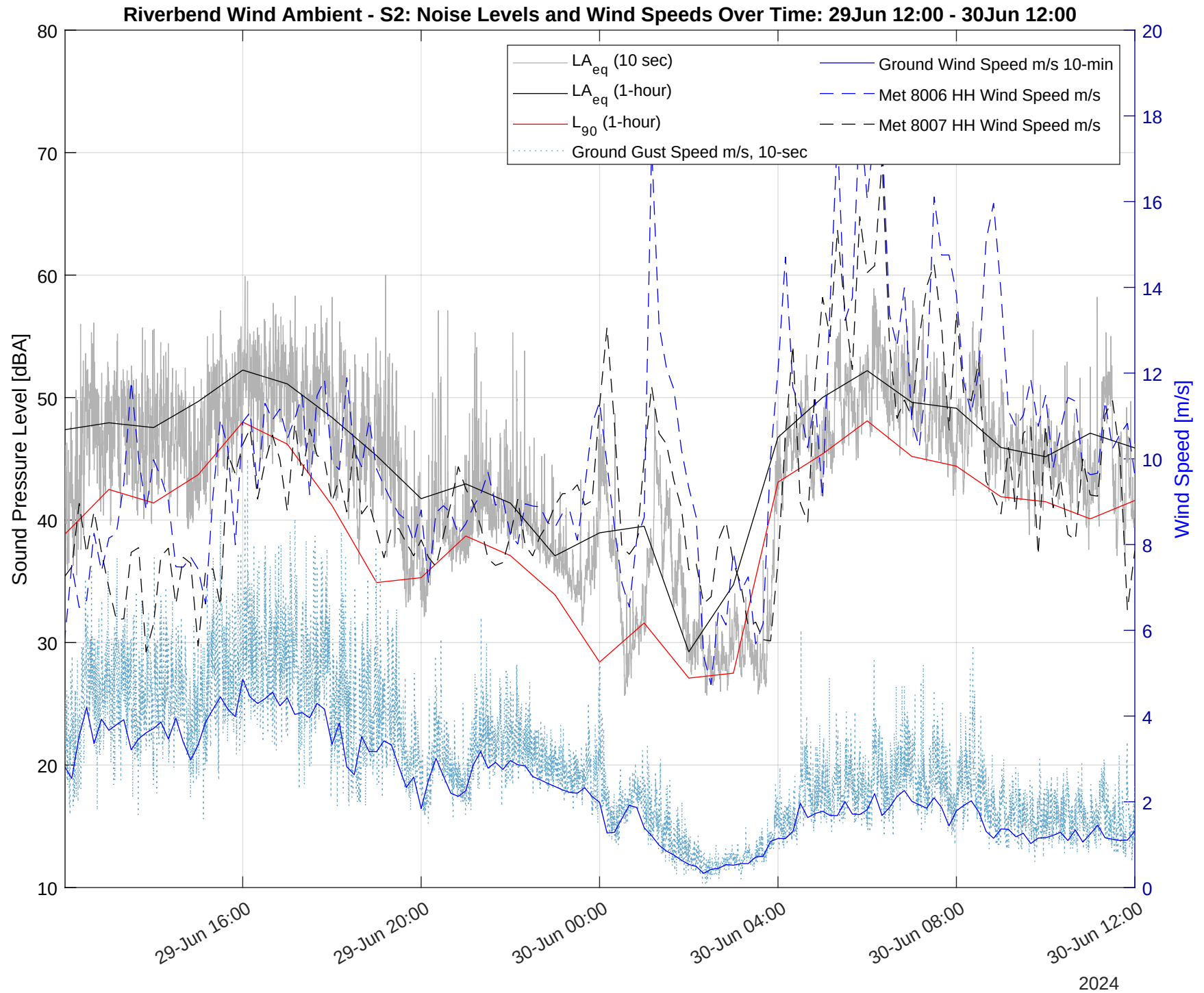


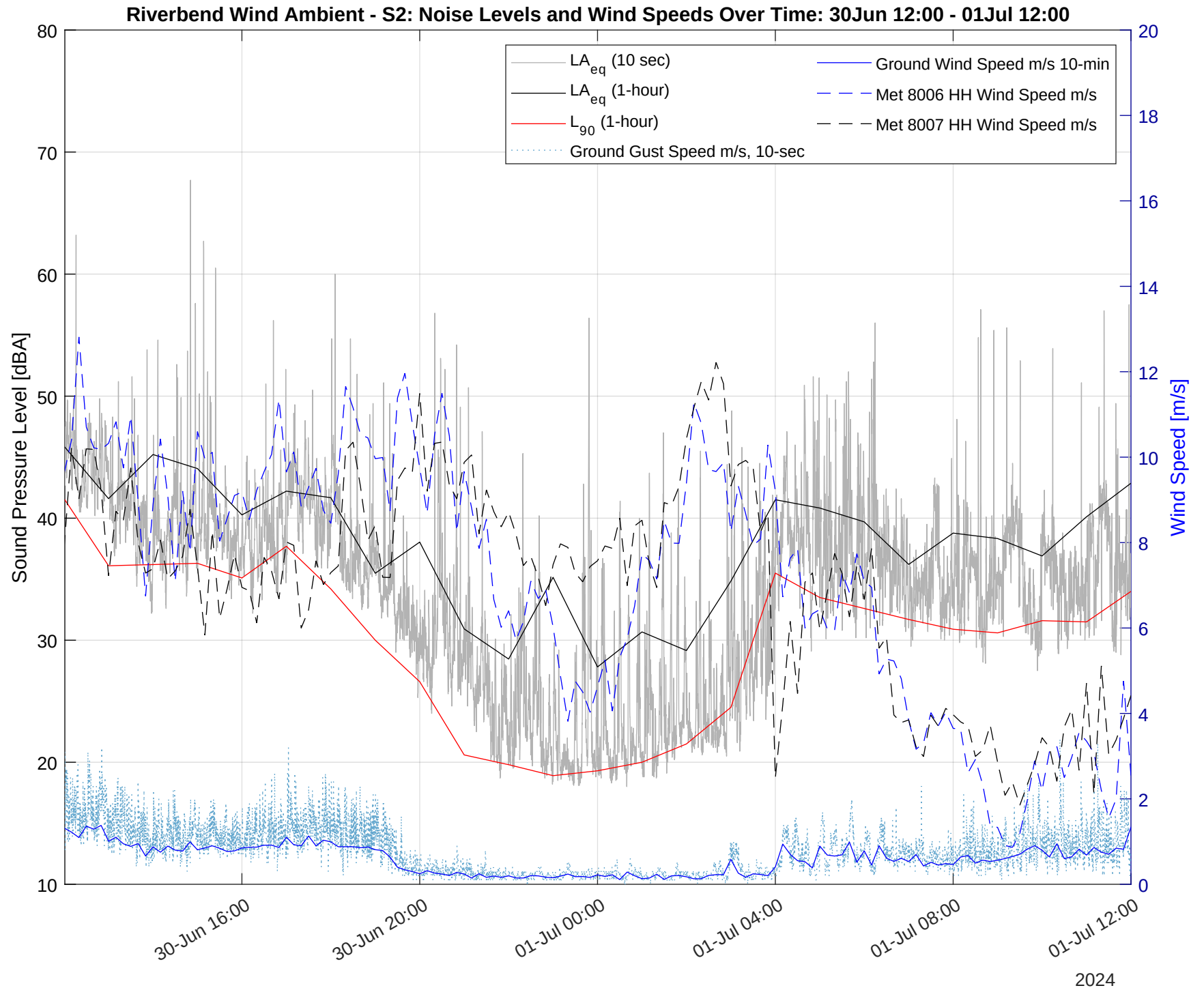


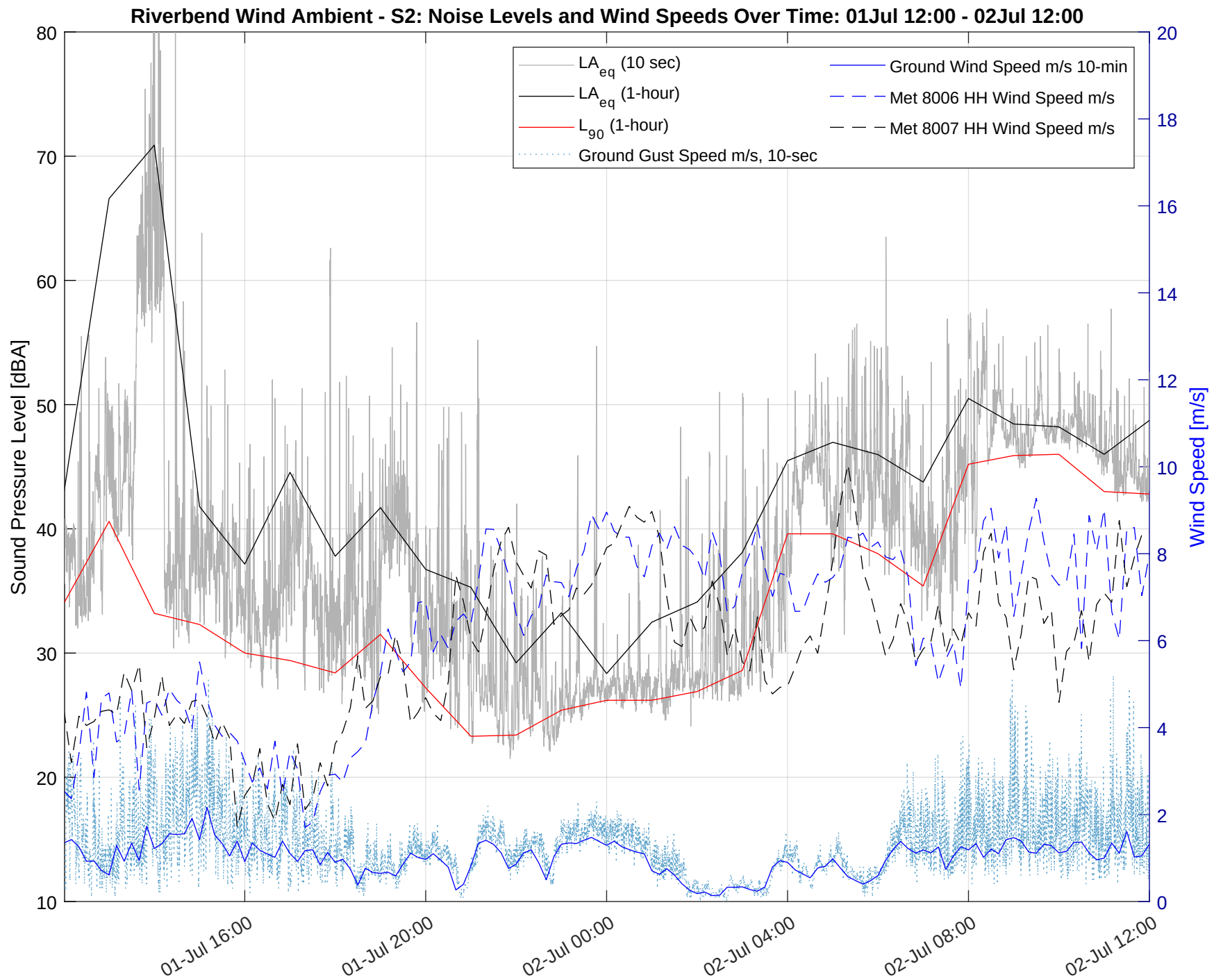


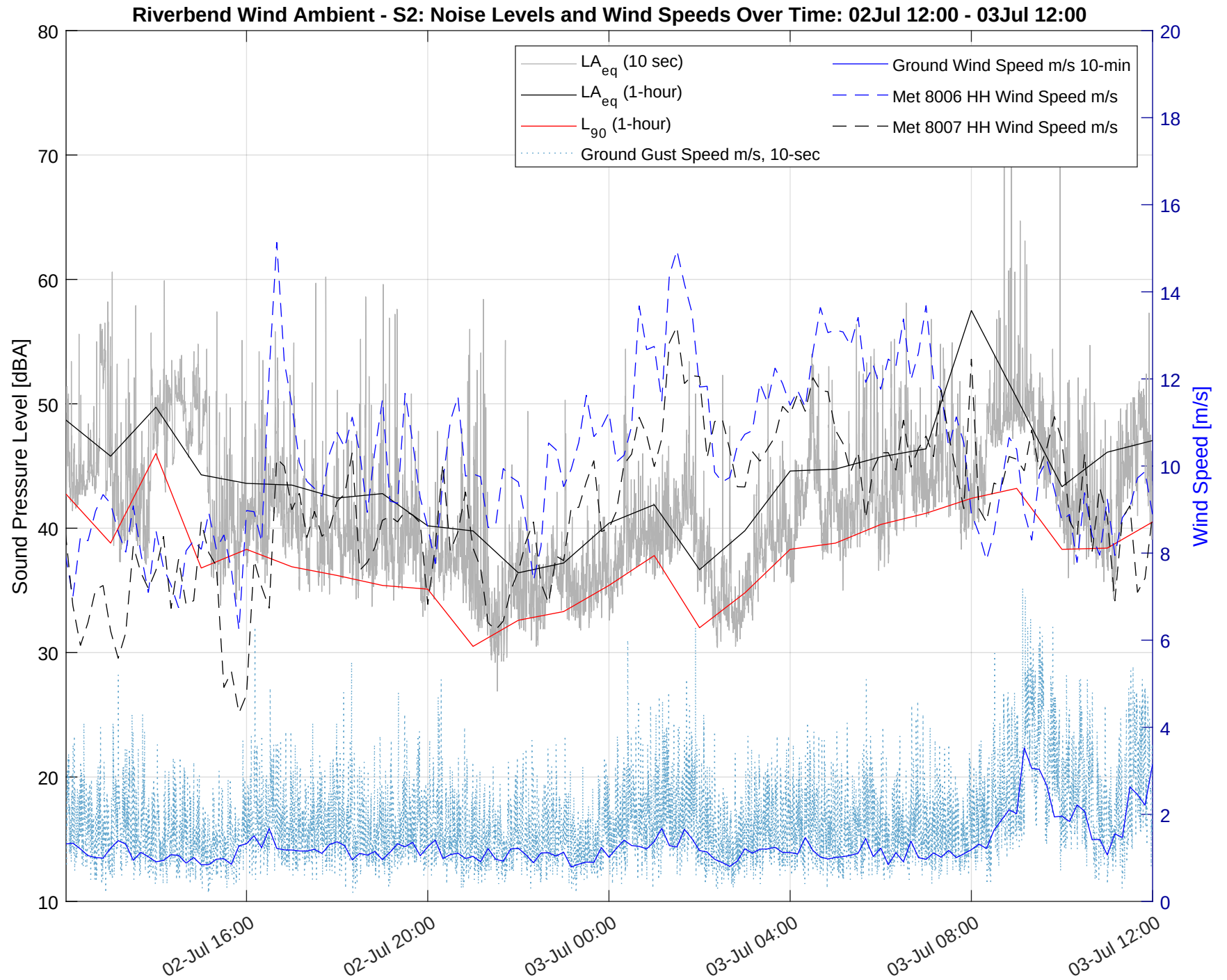


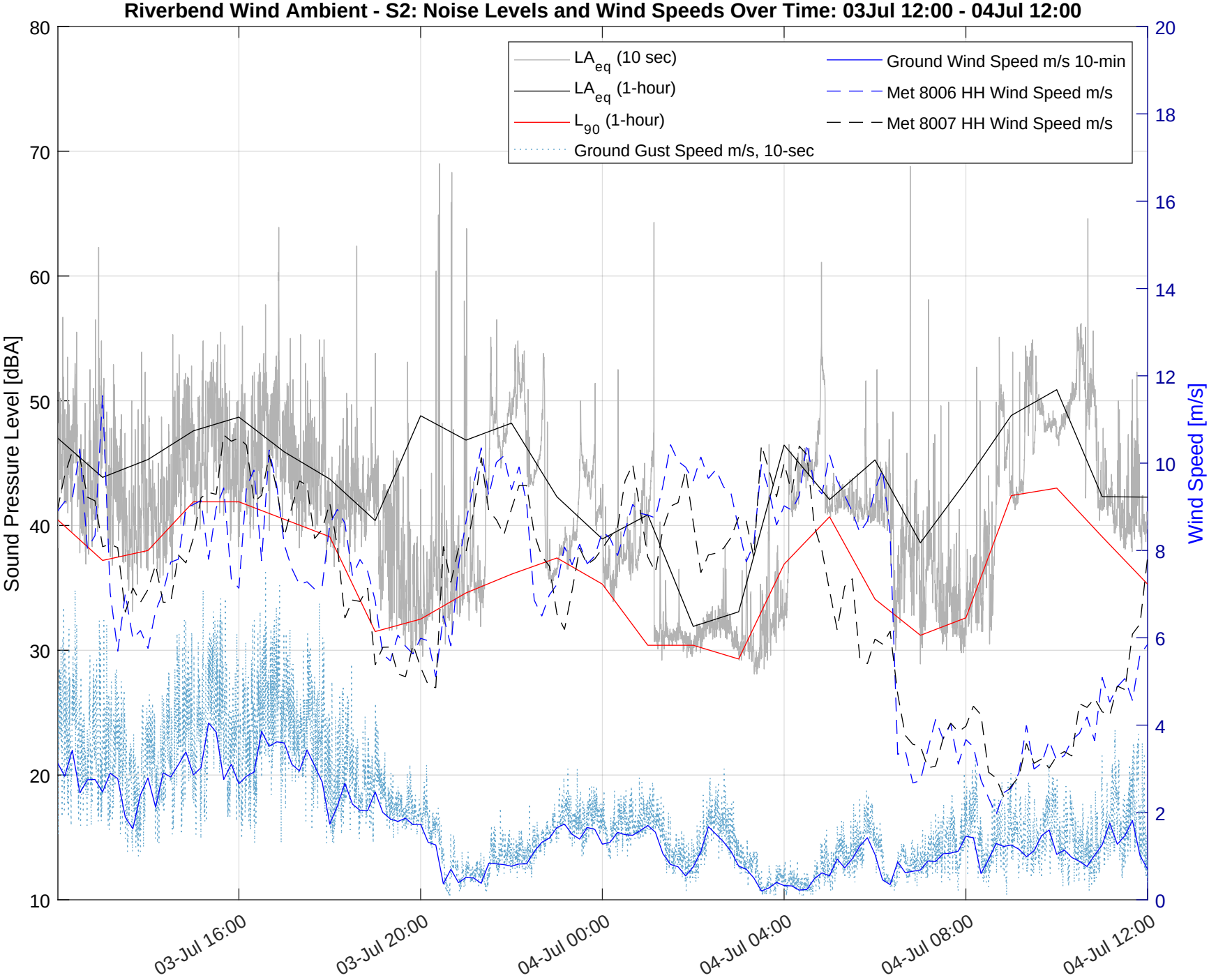


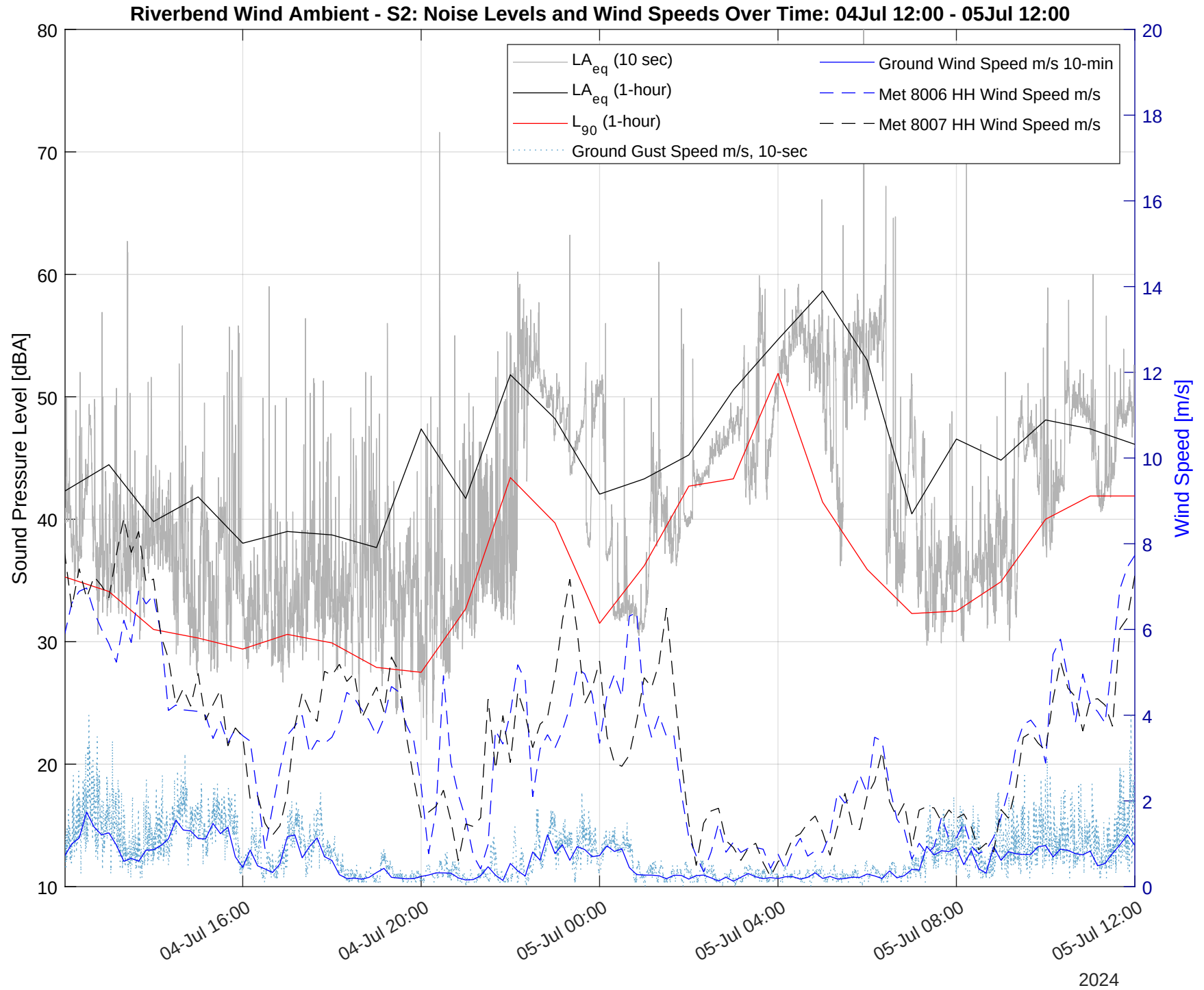


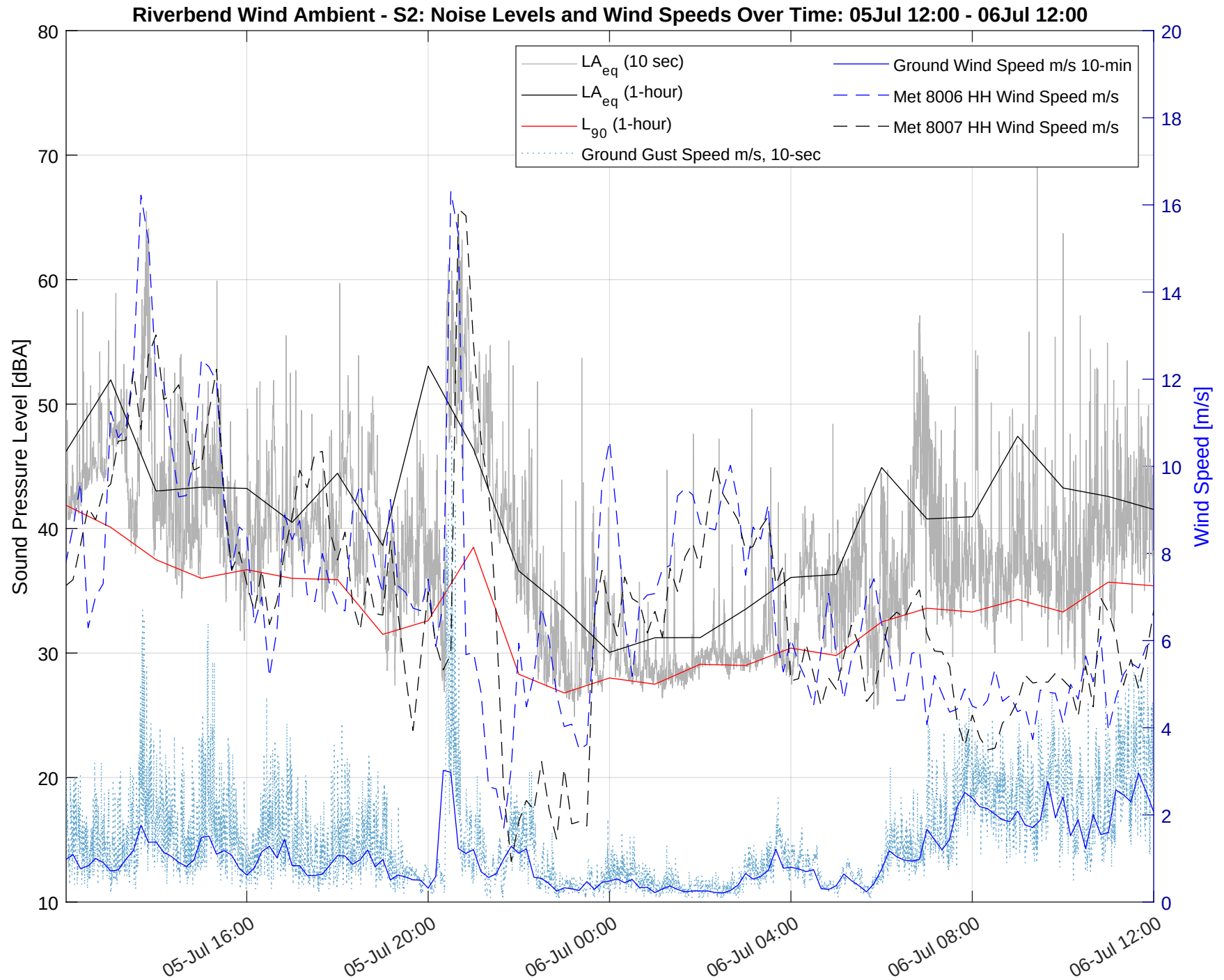


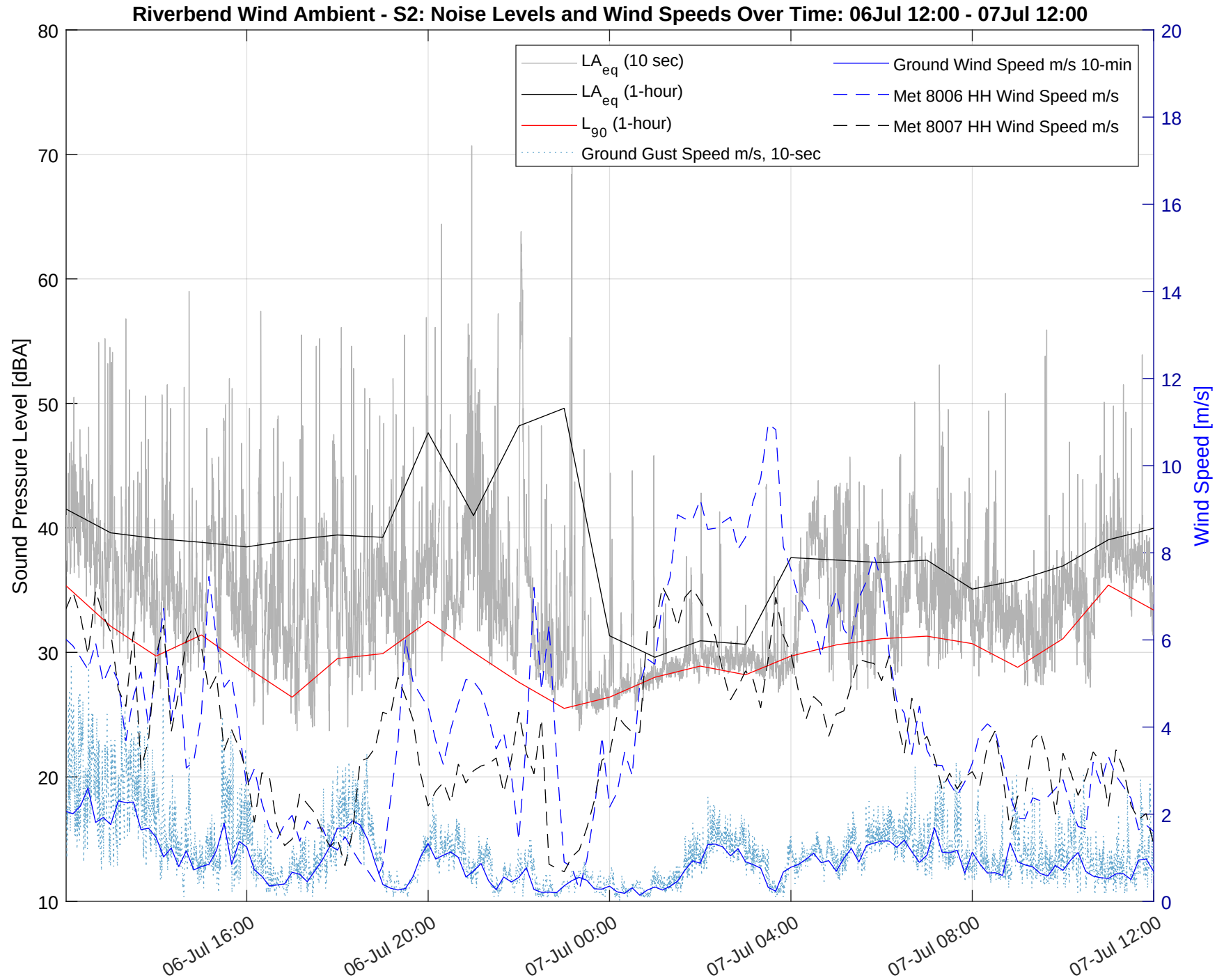


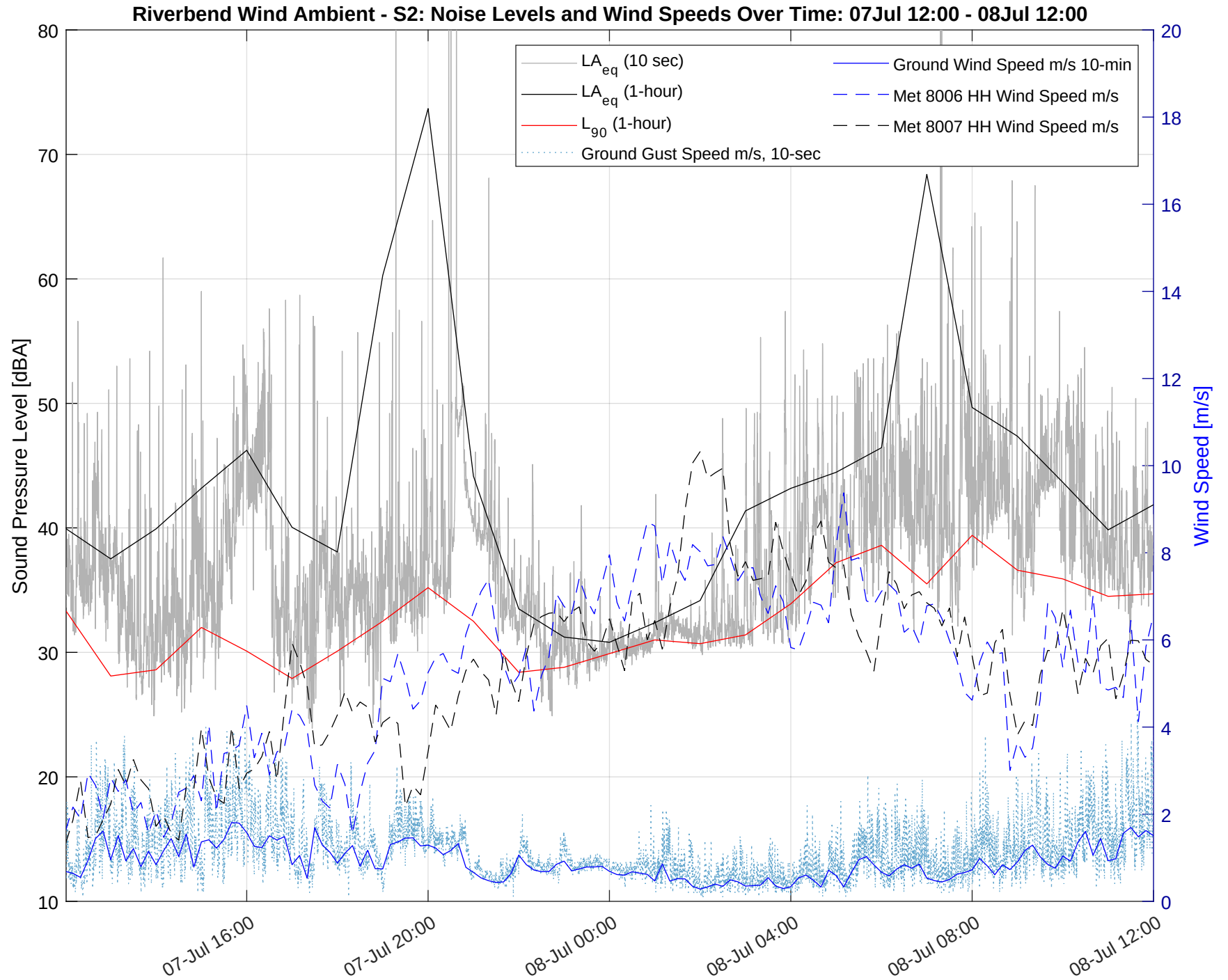


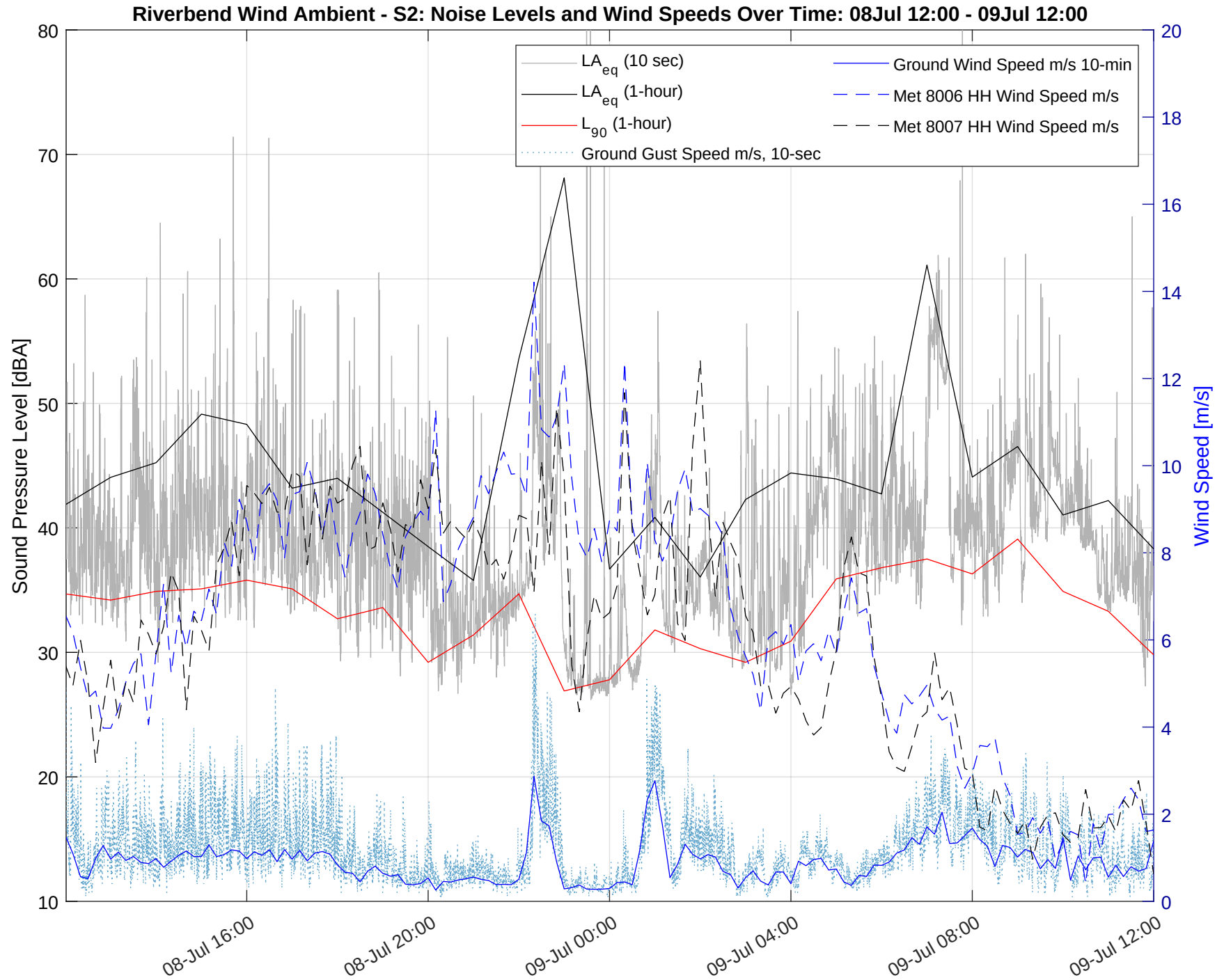


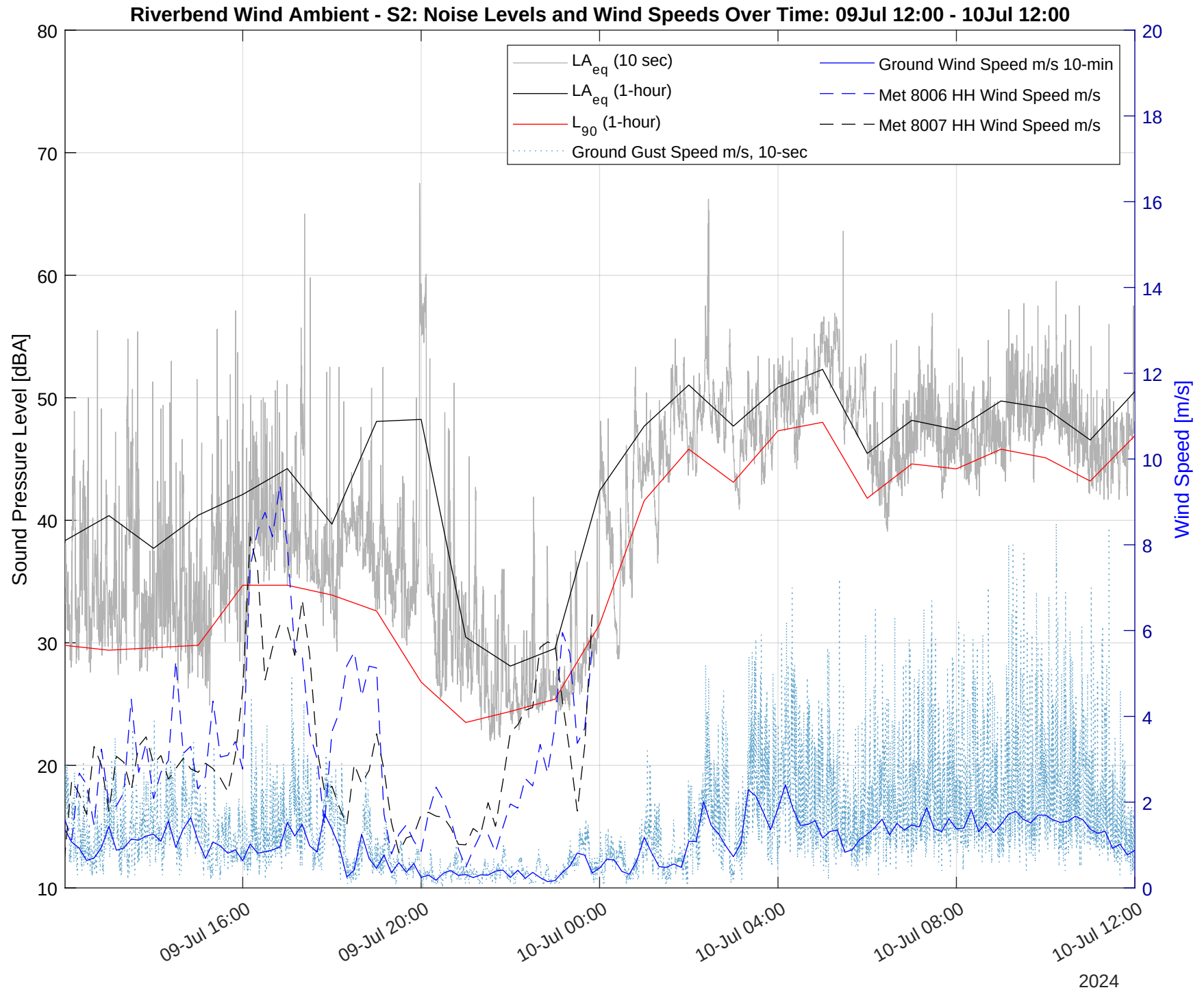


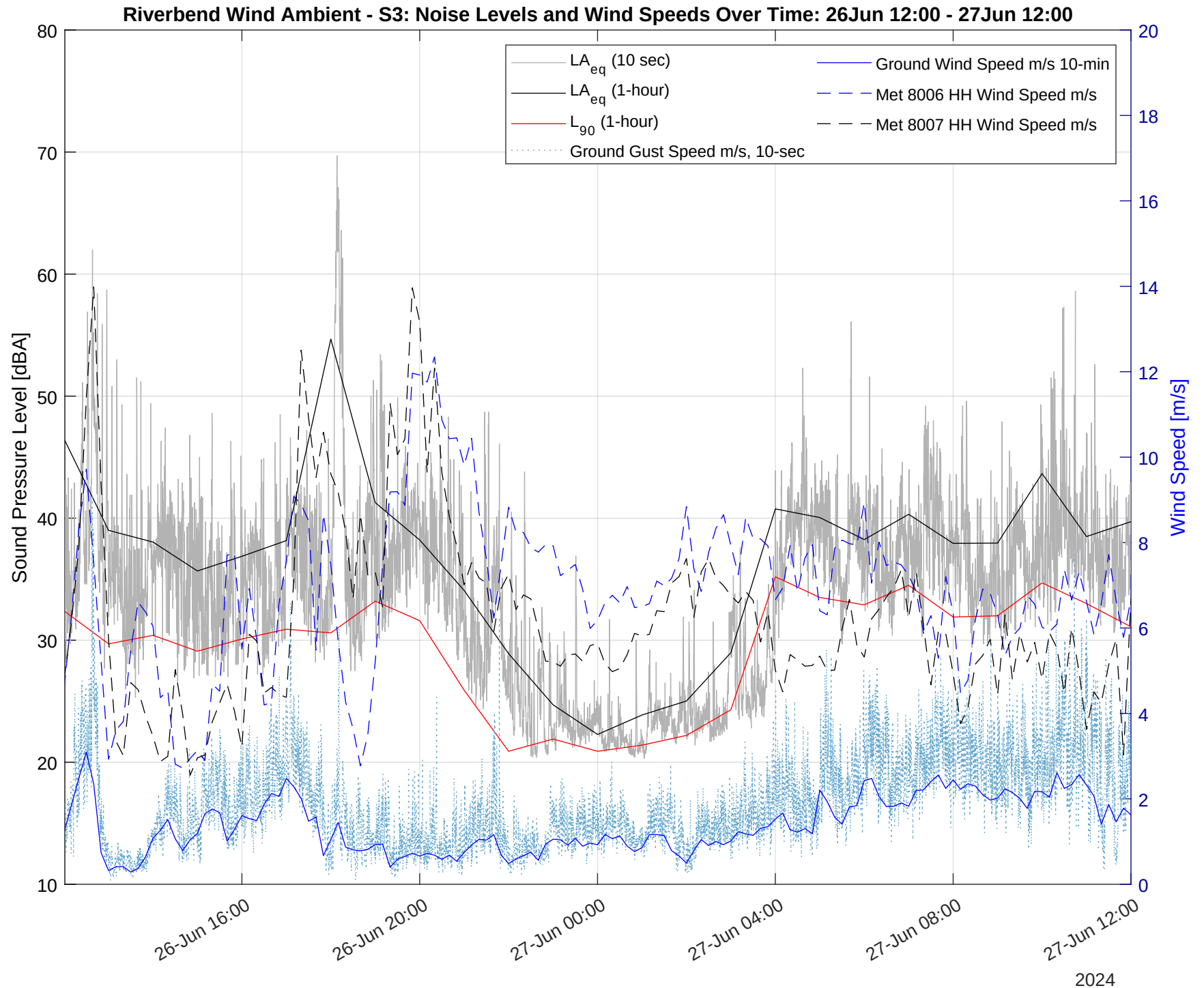


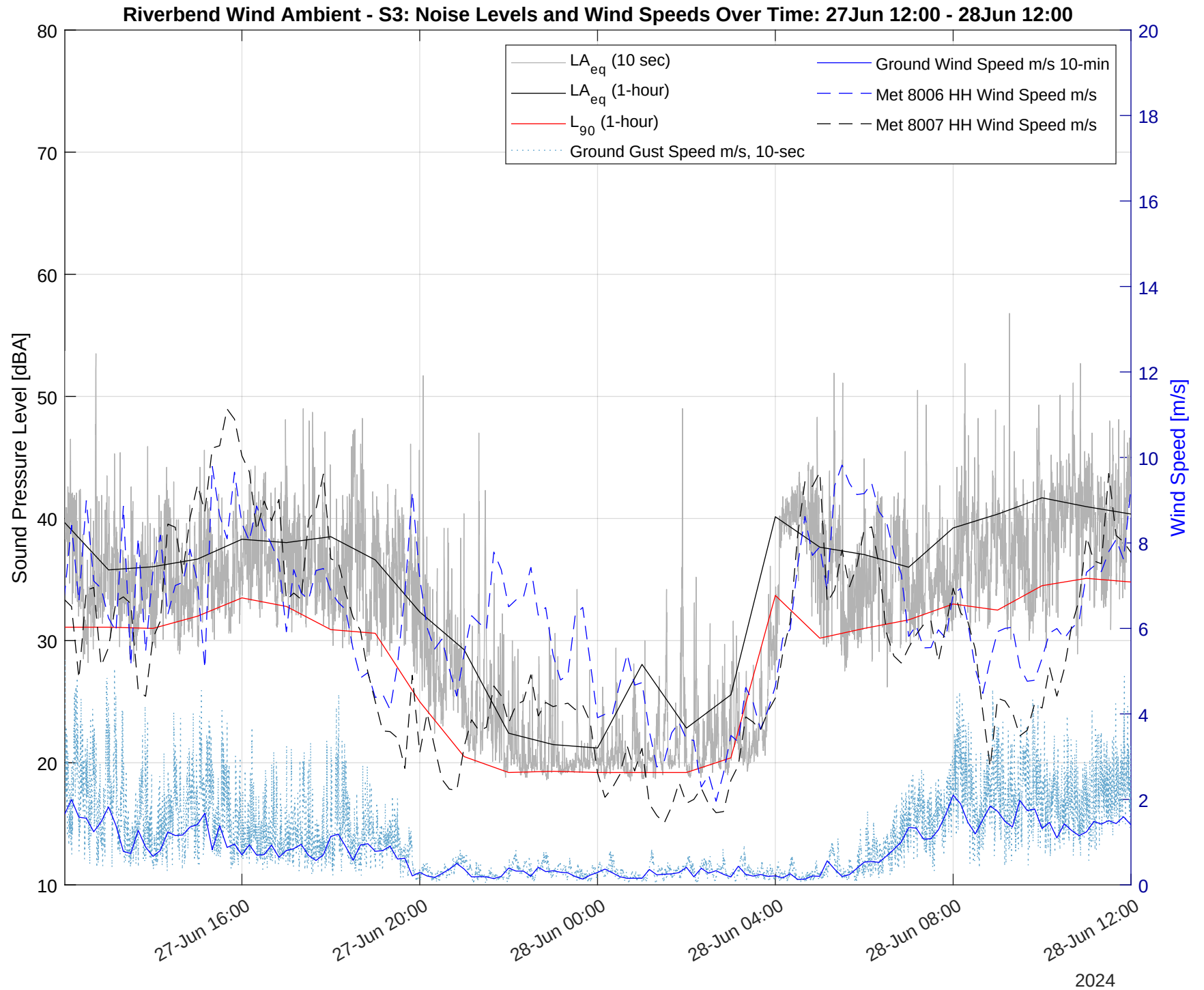


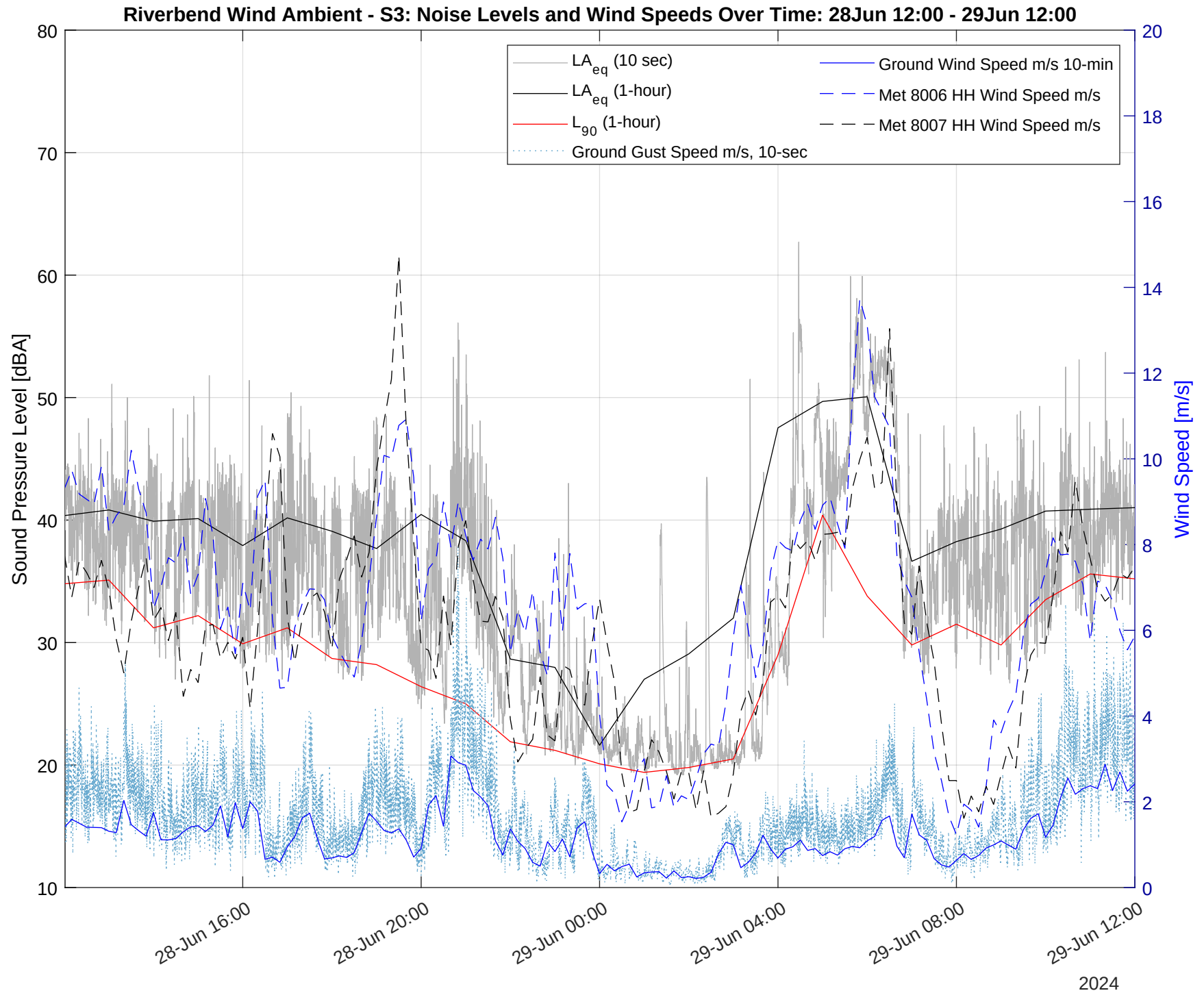


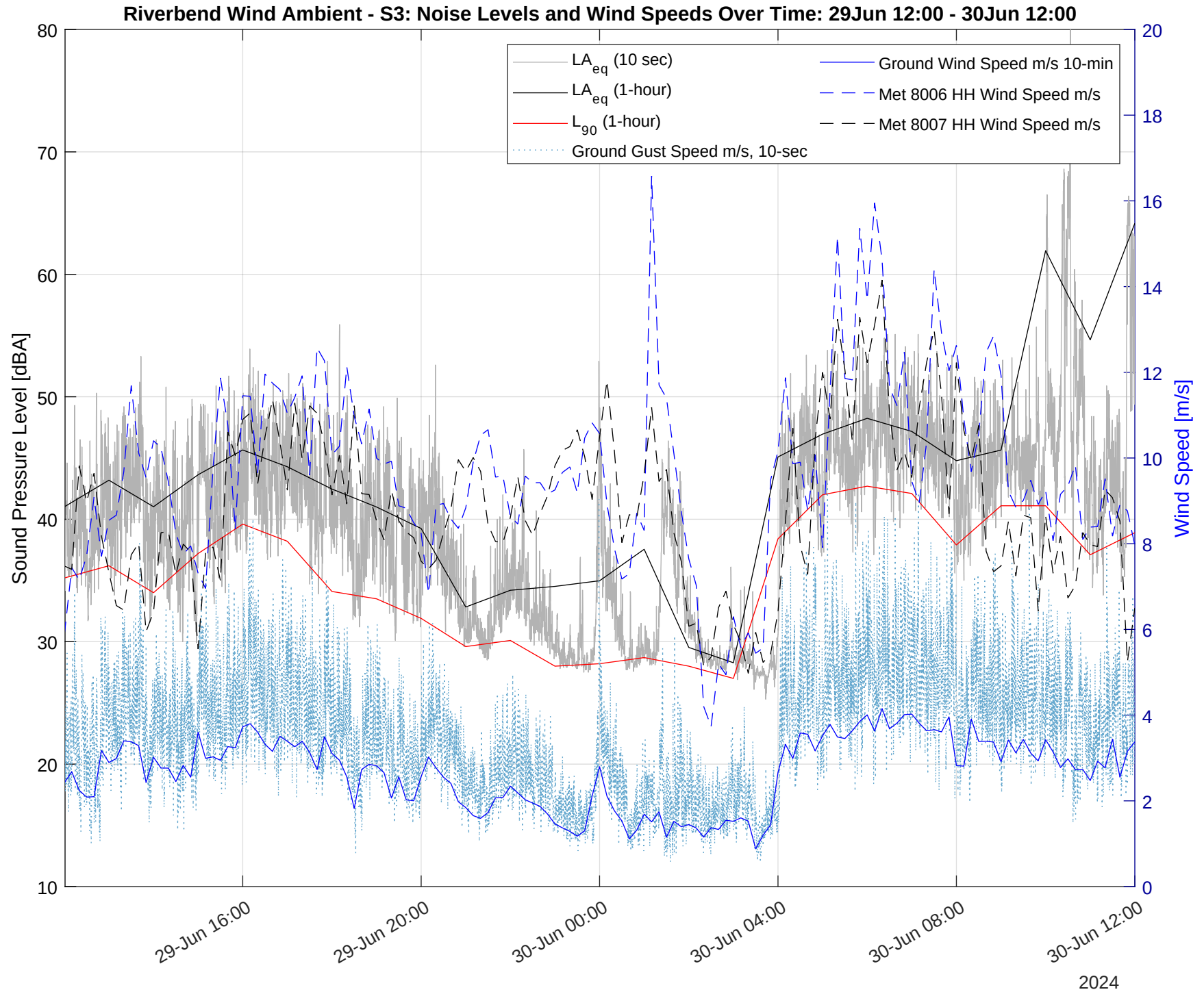


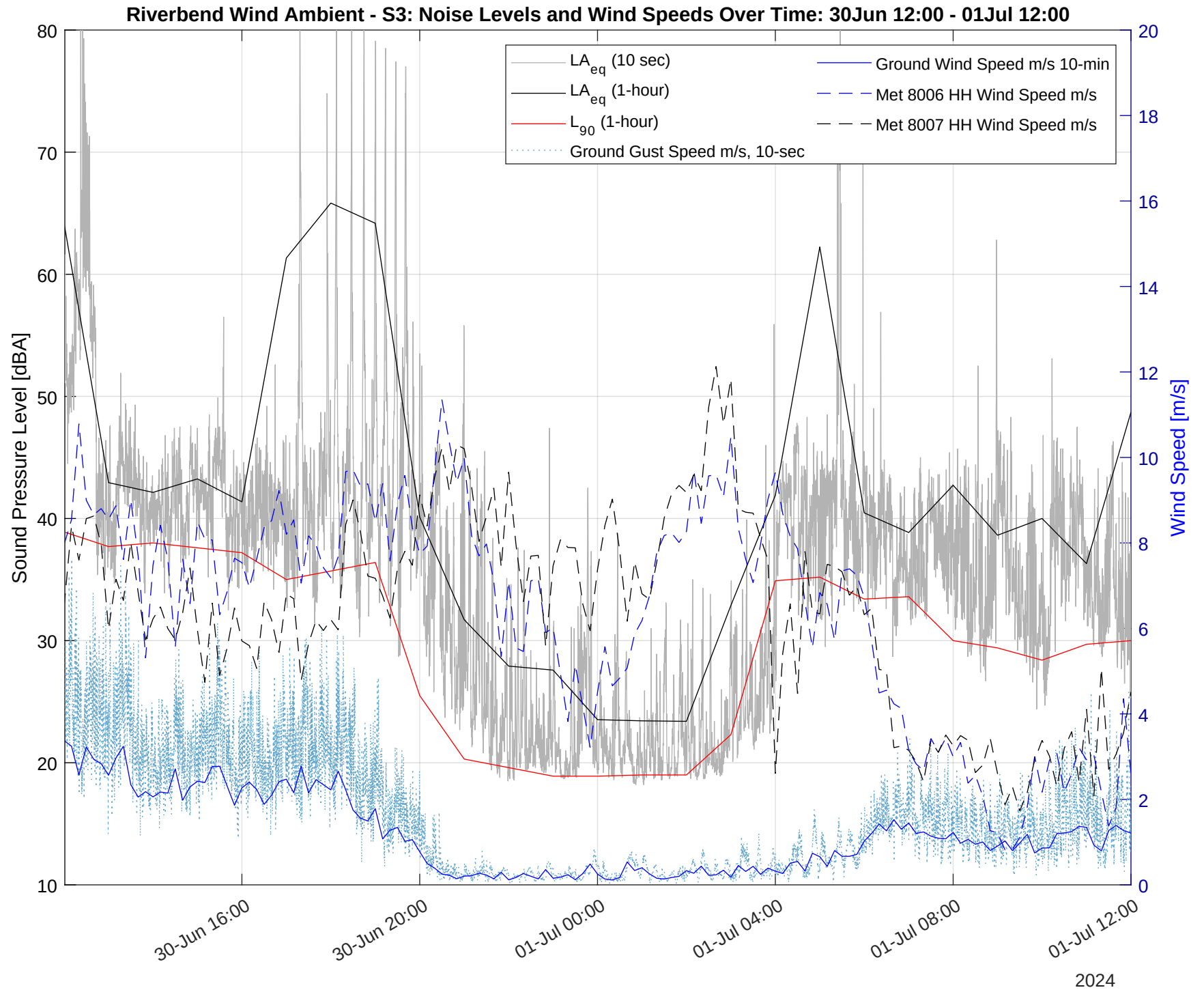


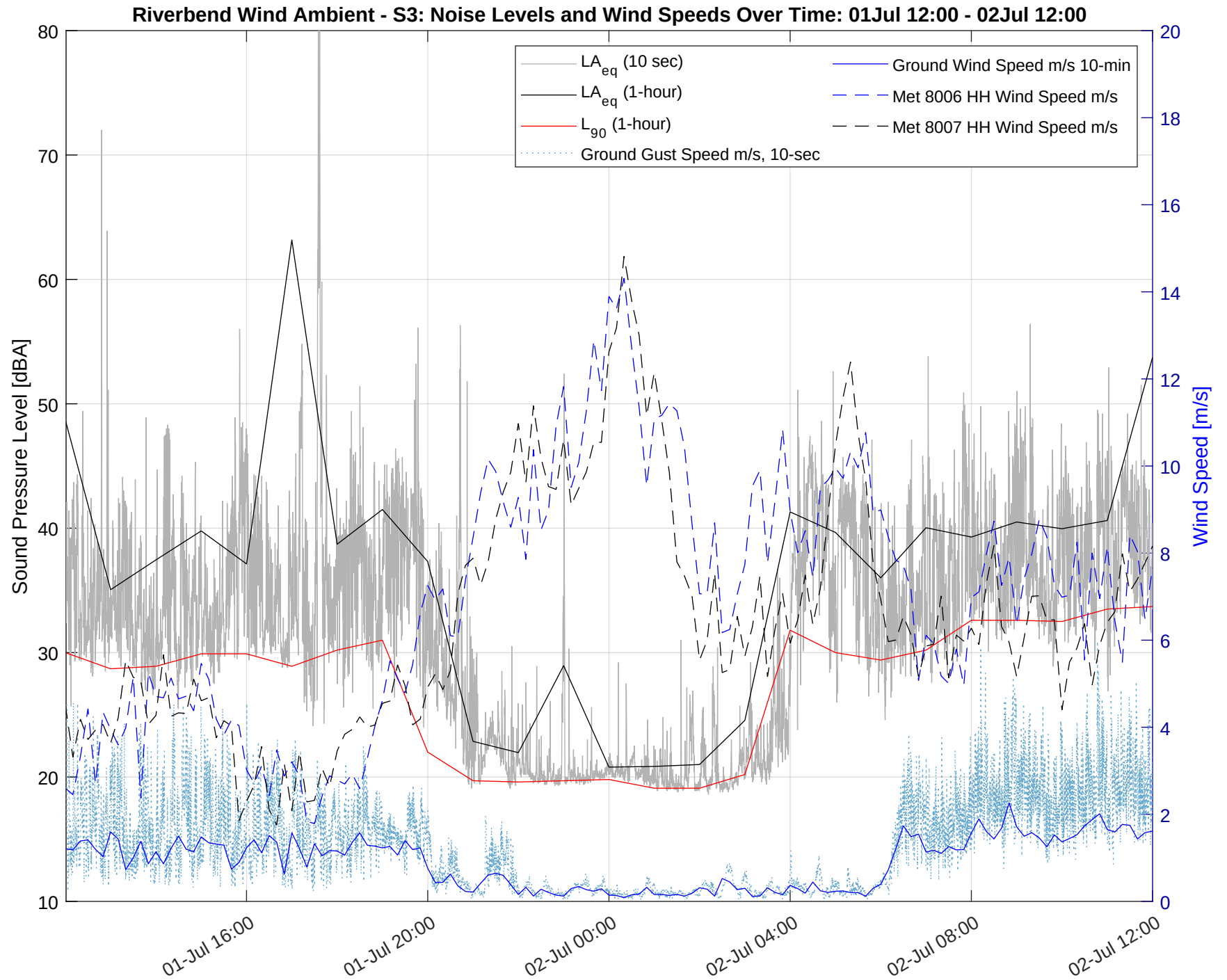


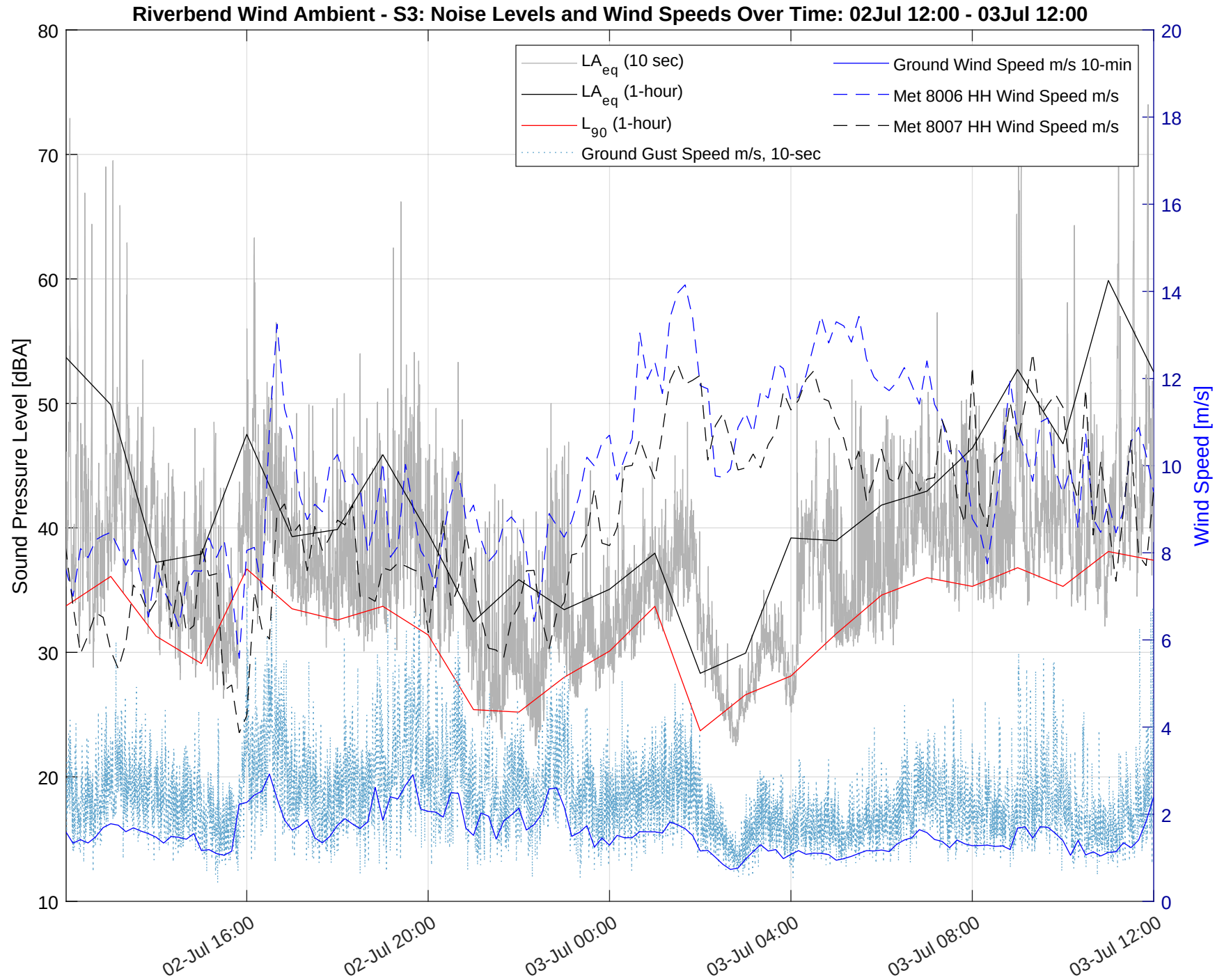


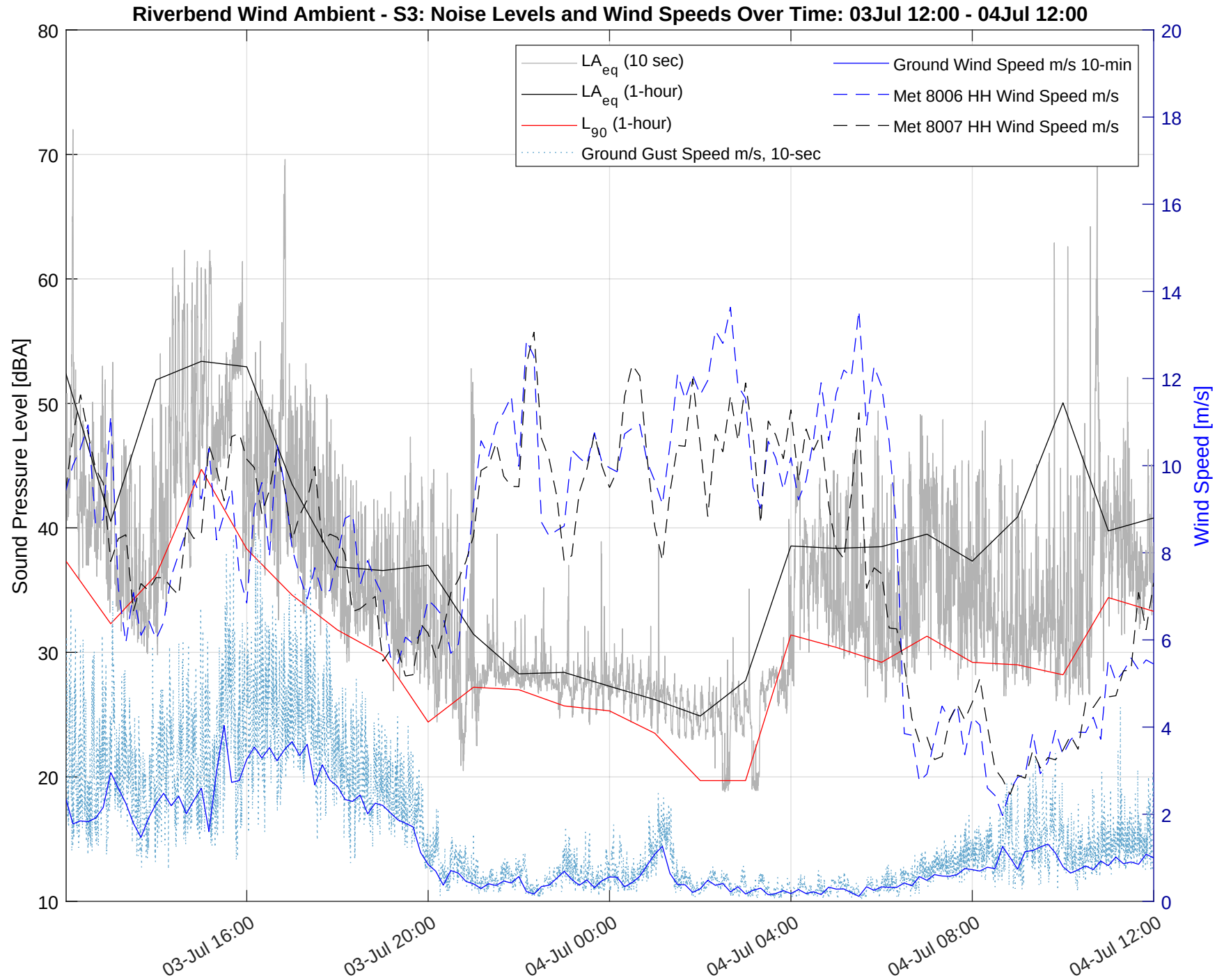


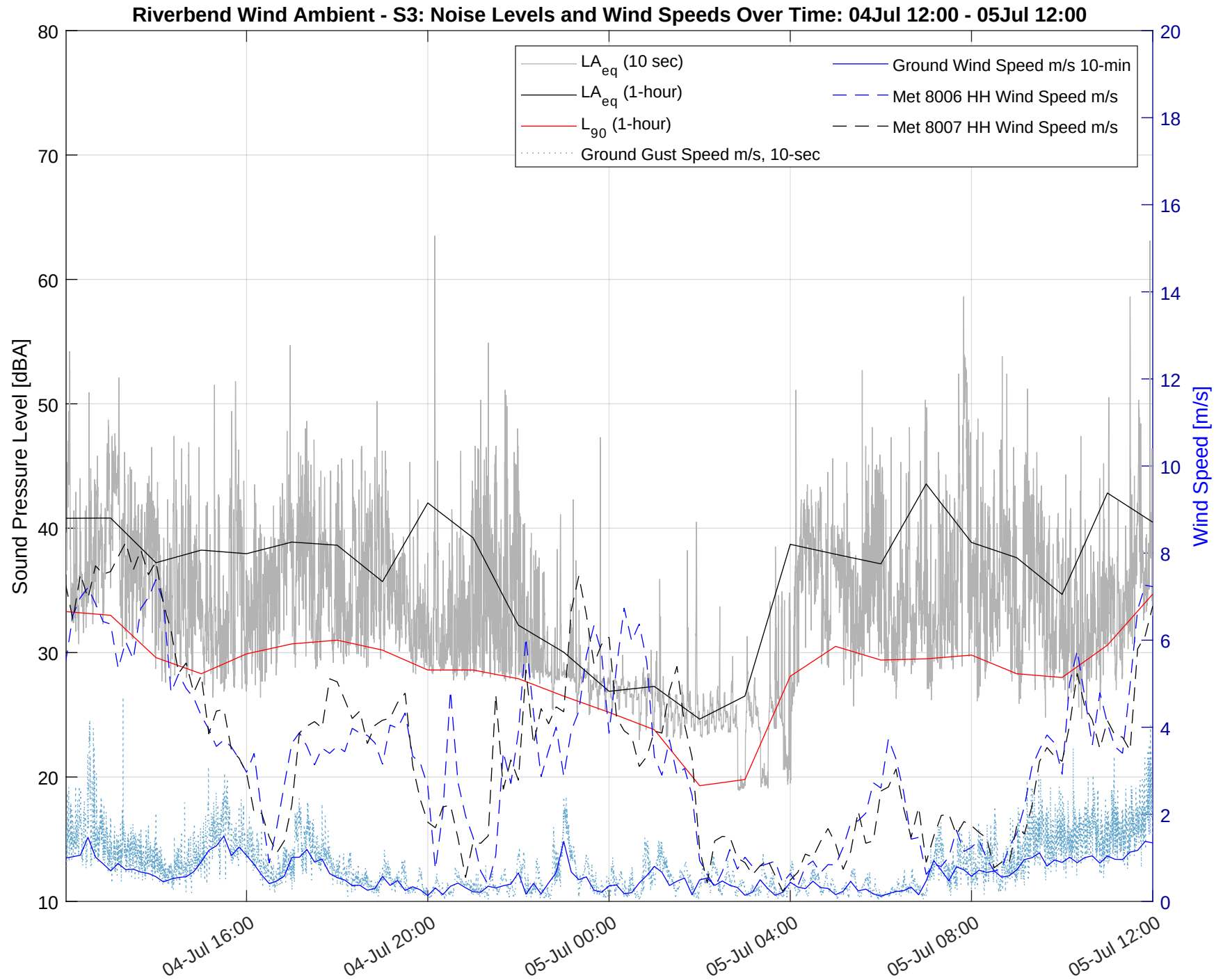


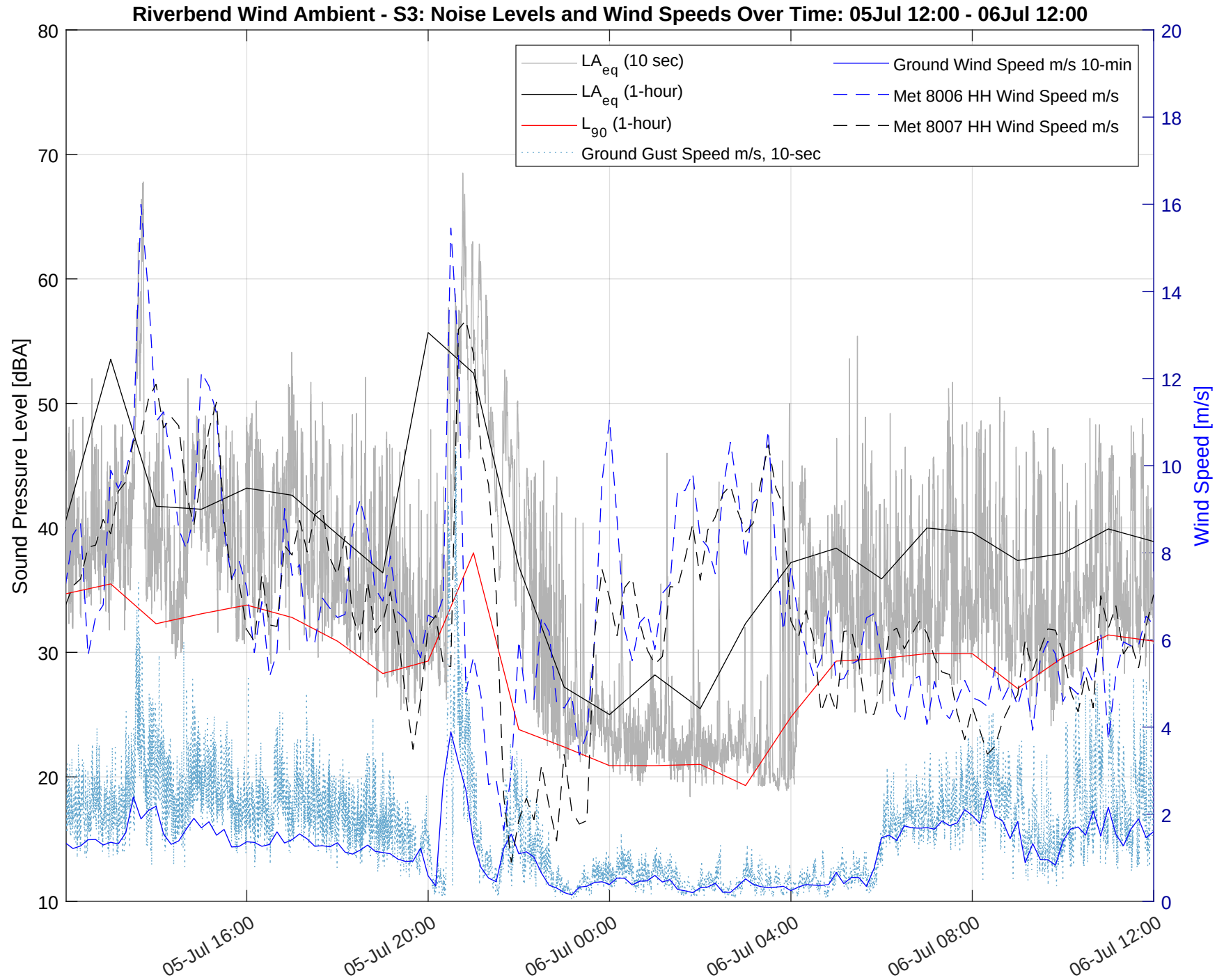


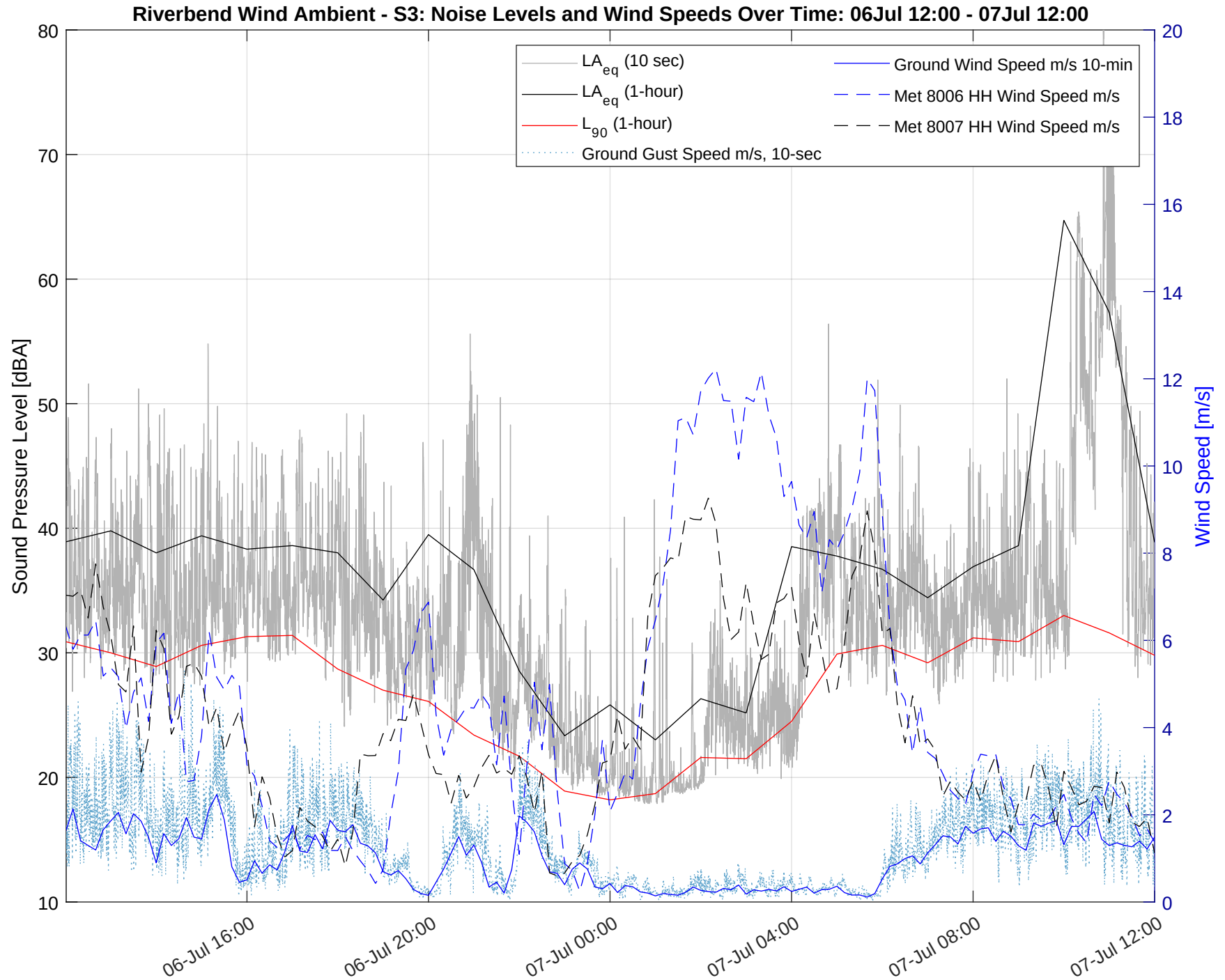


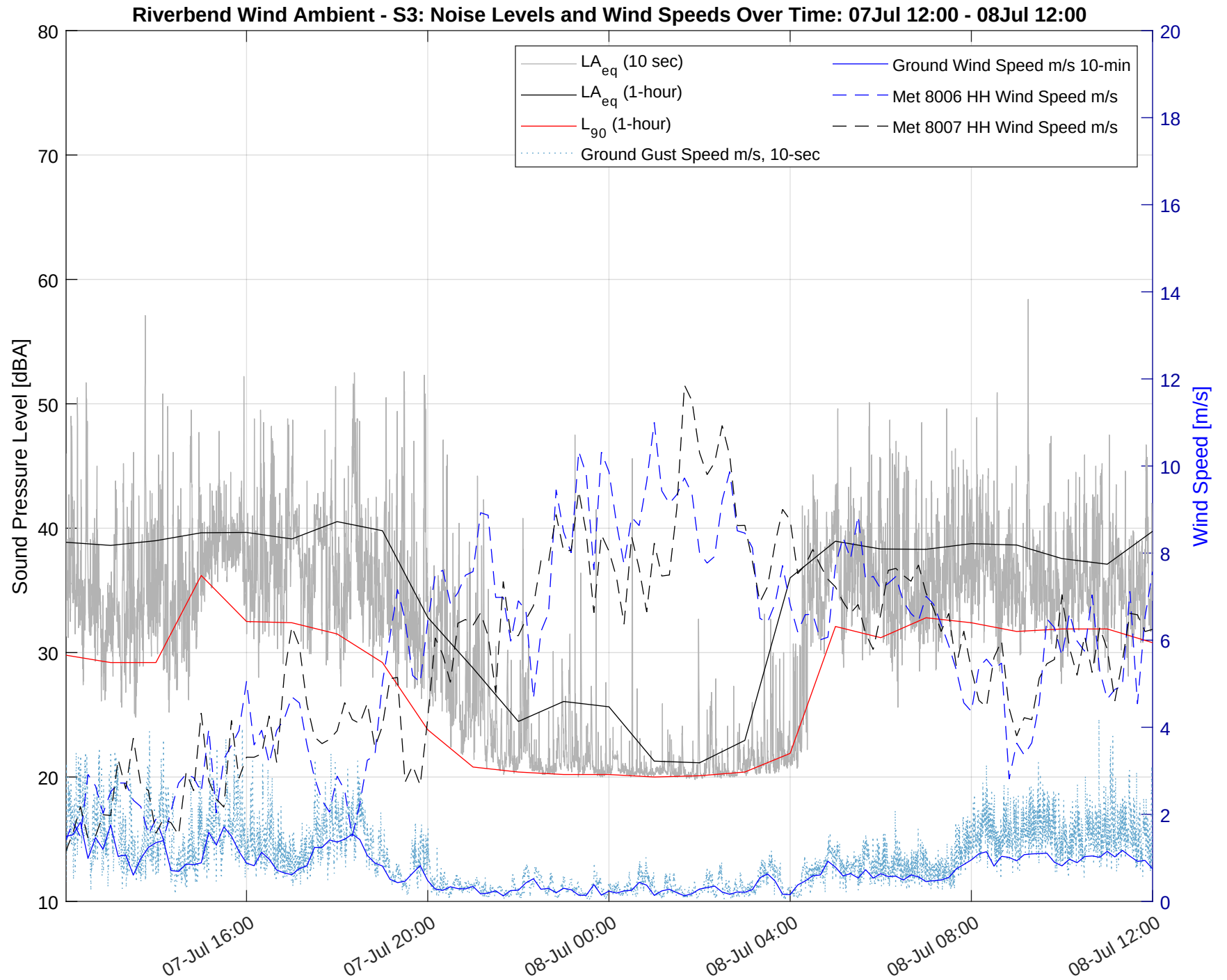


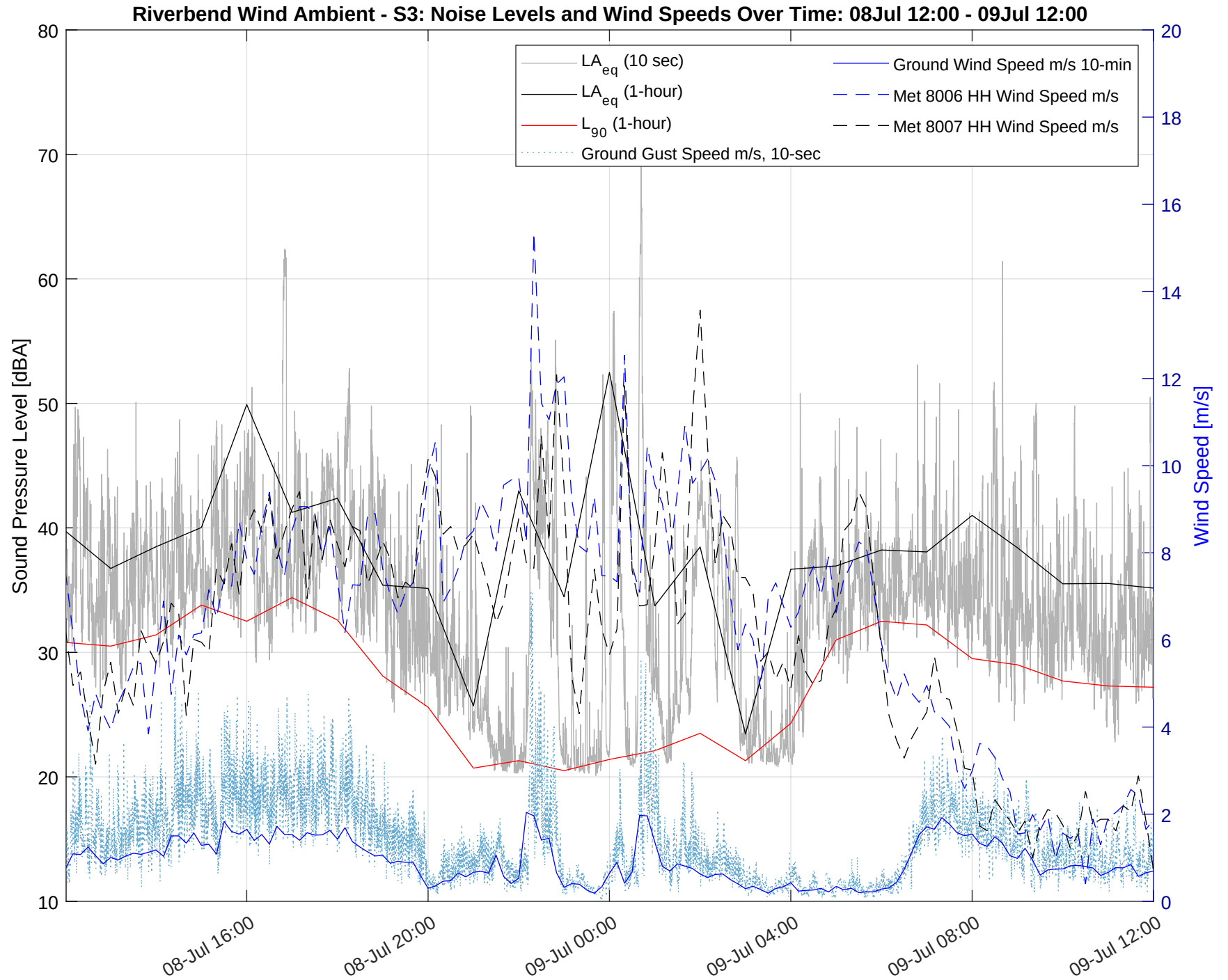


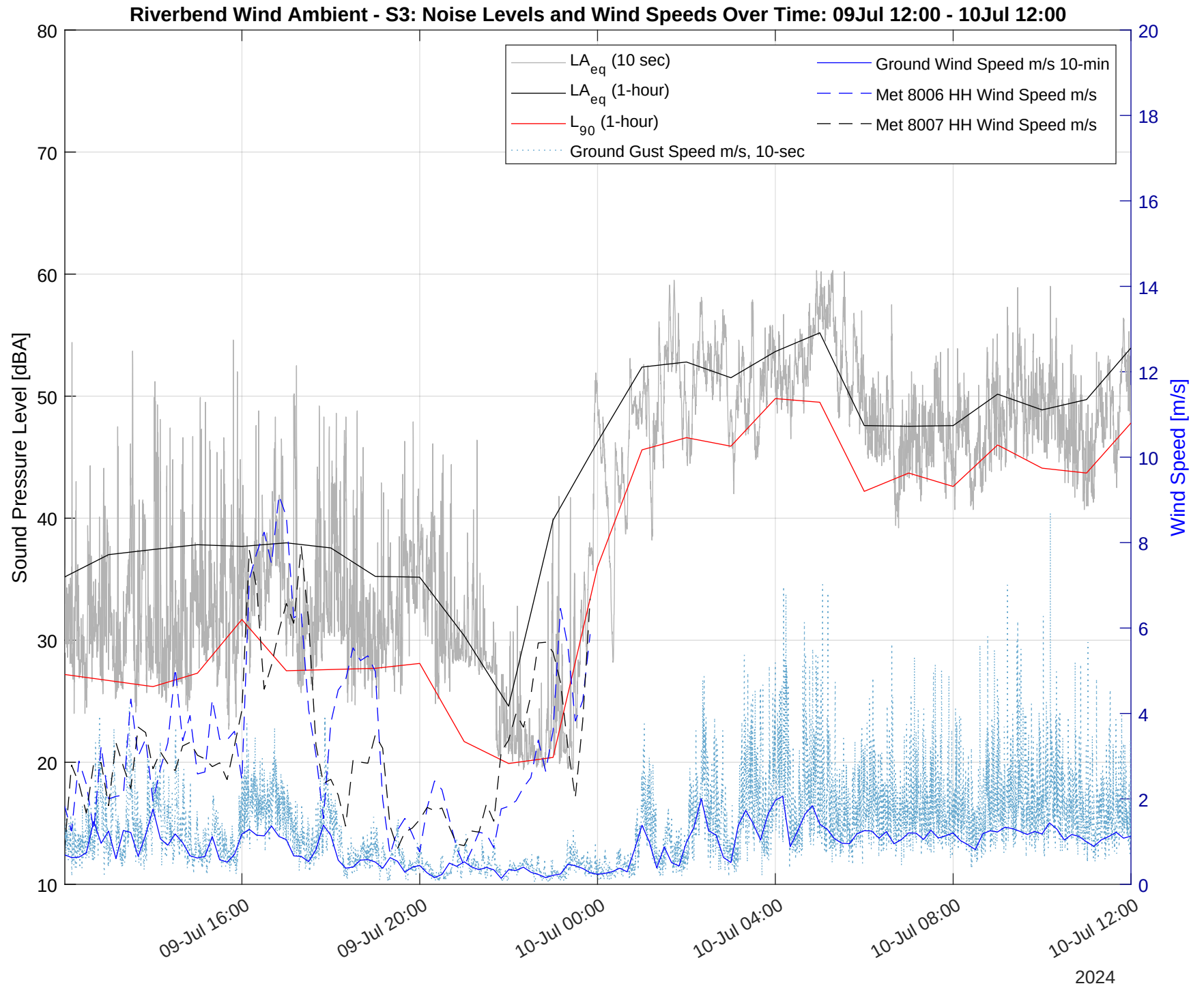












Detailed Maps and Photographs of Measurement Locations

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

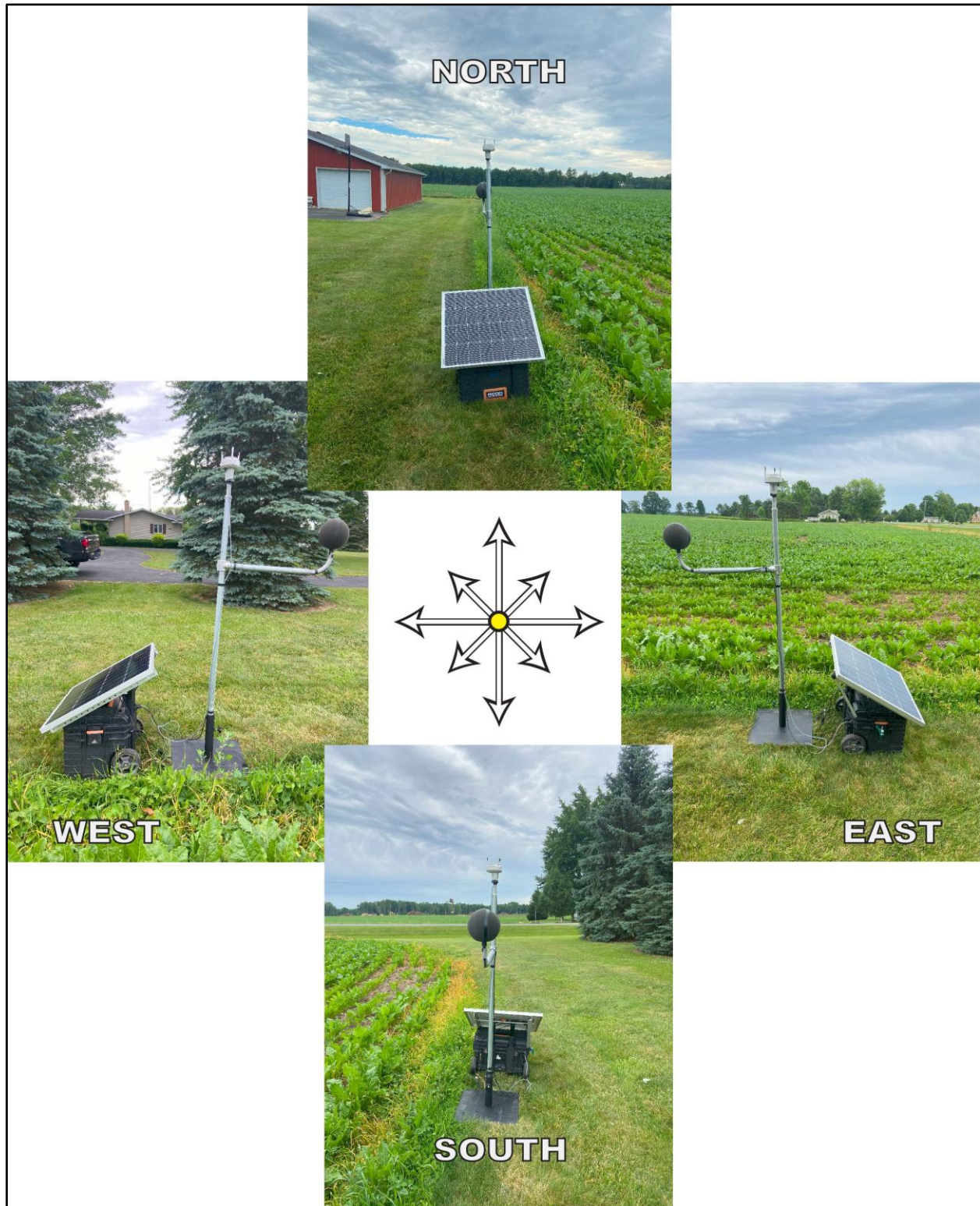


Figure D-4. Photographs of Location Fremont 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

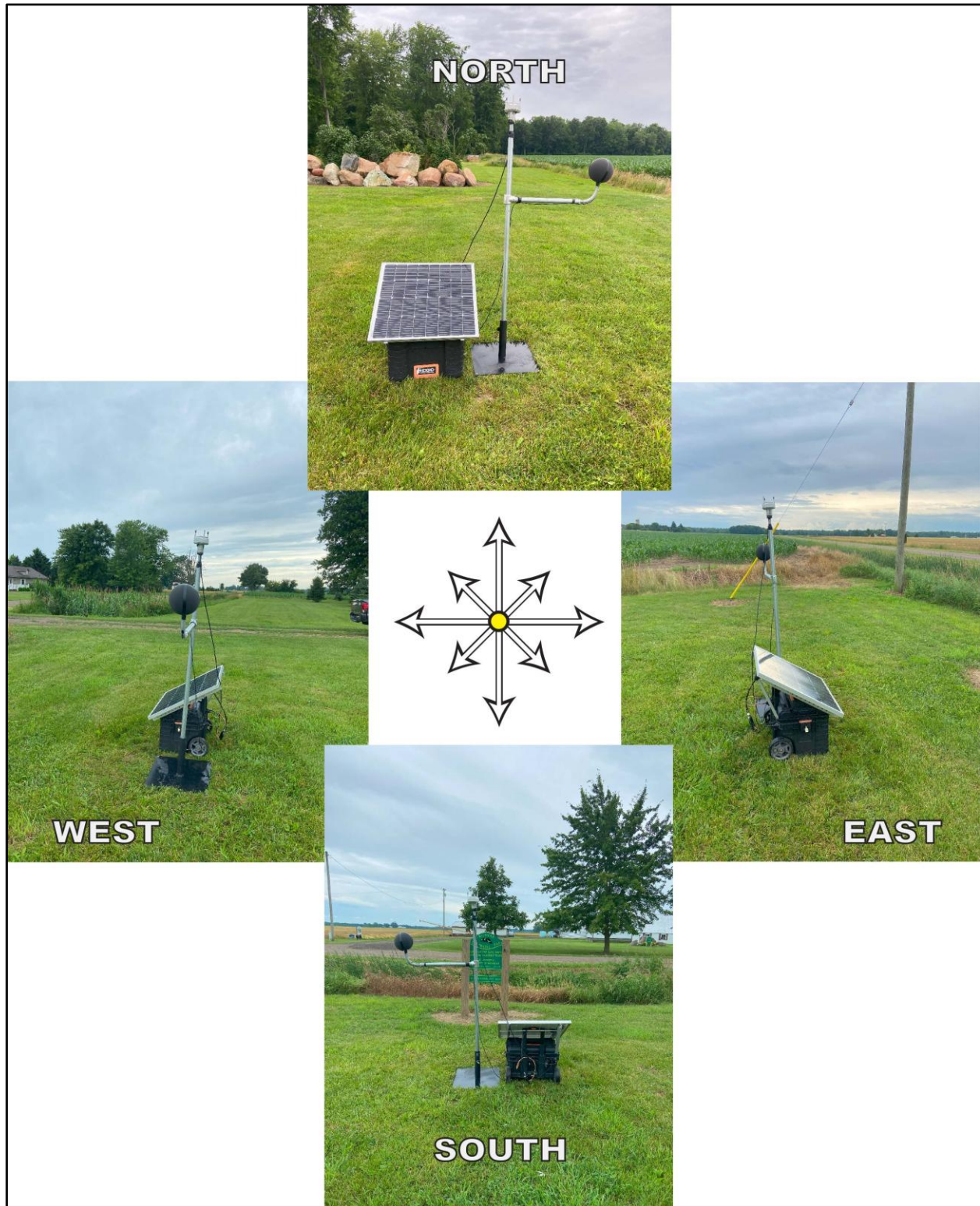


Figure D-5. Photographs of Location Fremont 2

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

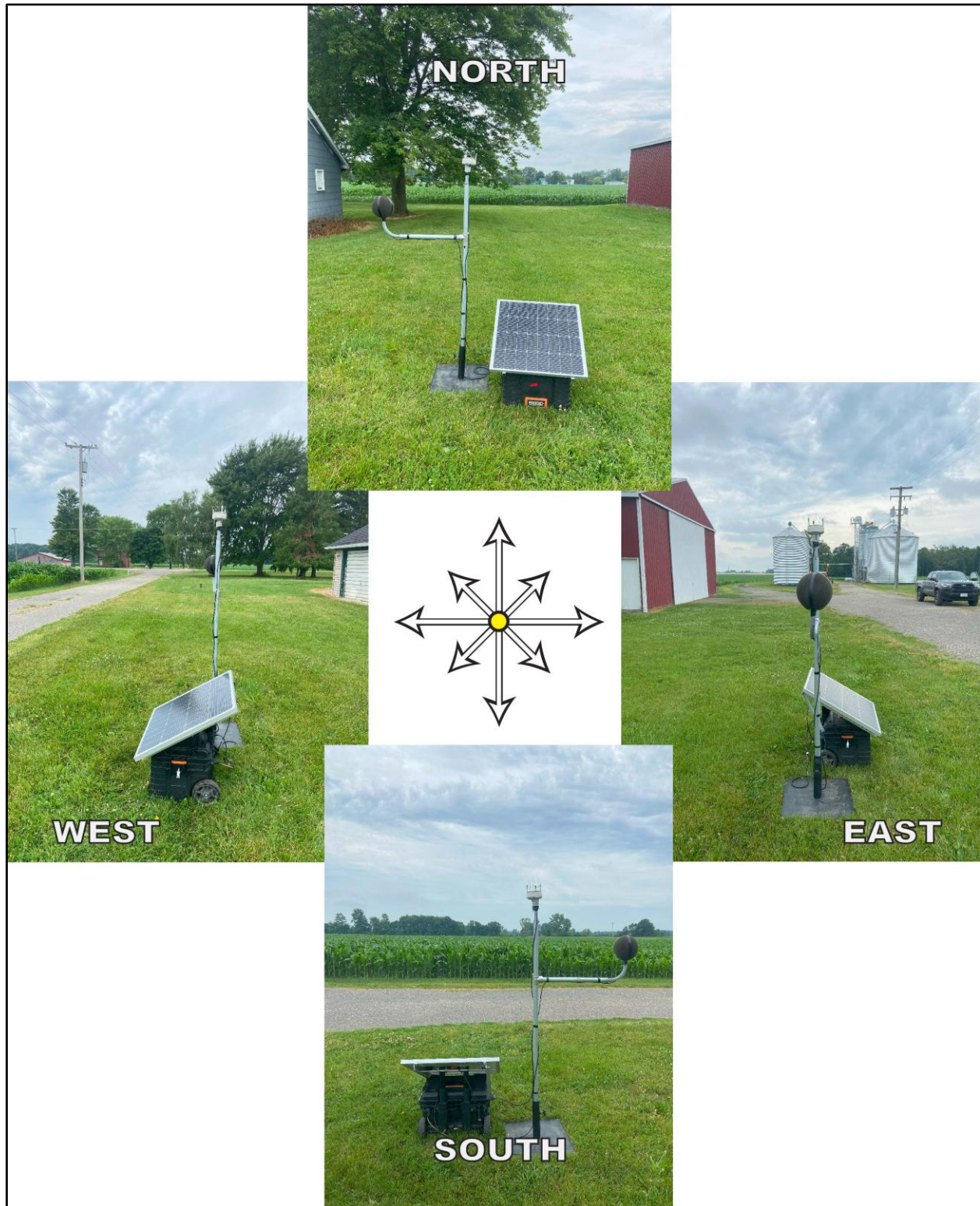


Figure D-6. Photographs of Location Fremont 3

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

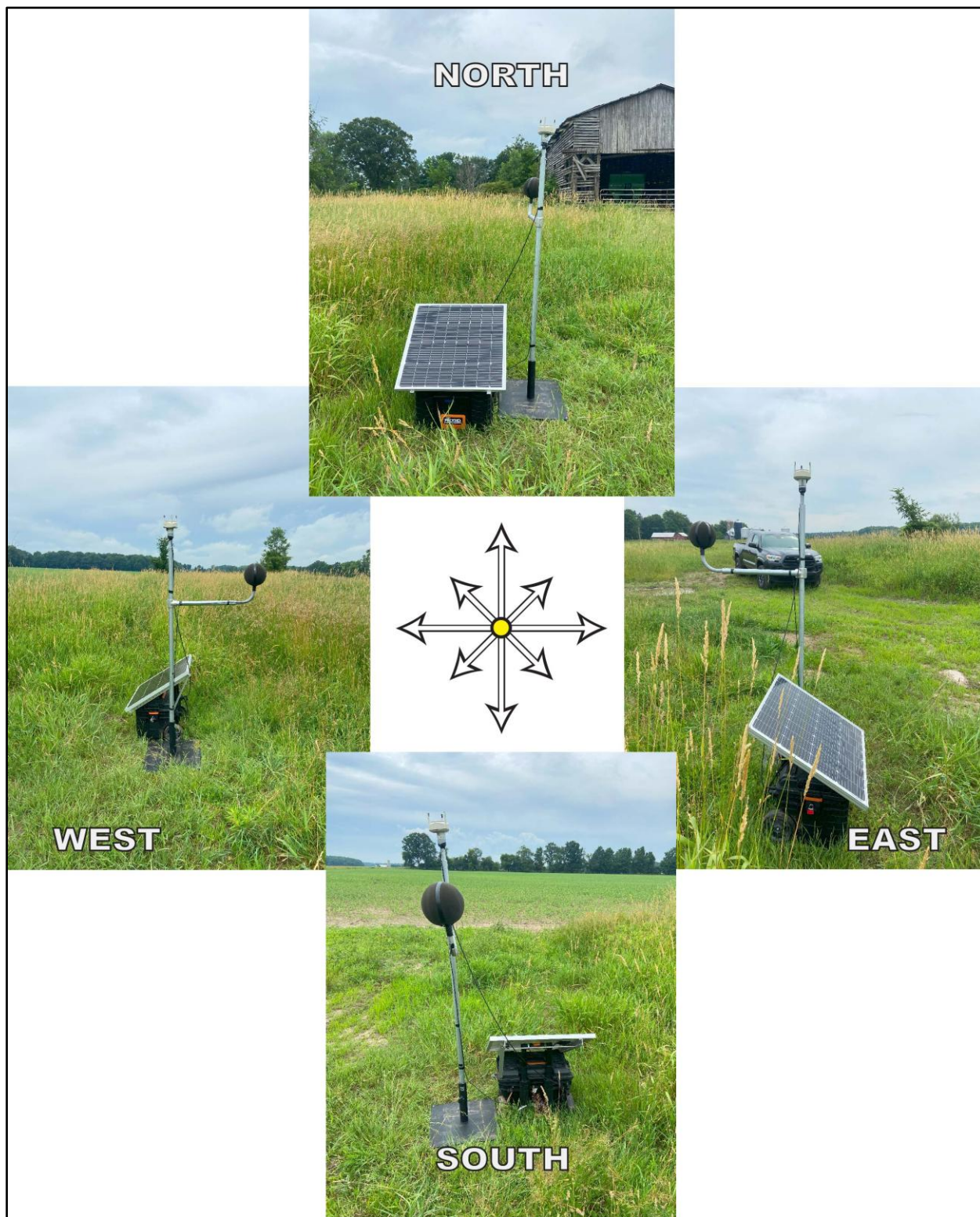


Figure D-7. Photographs of Location Speaker 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

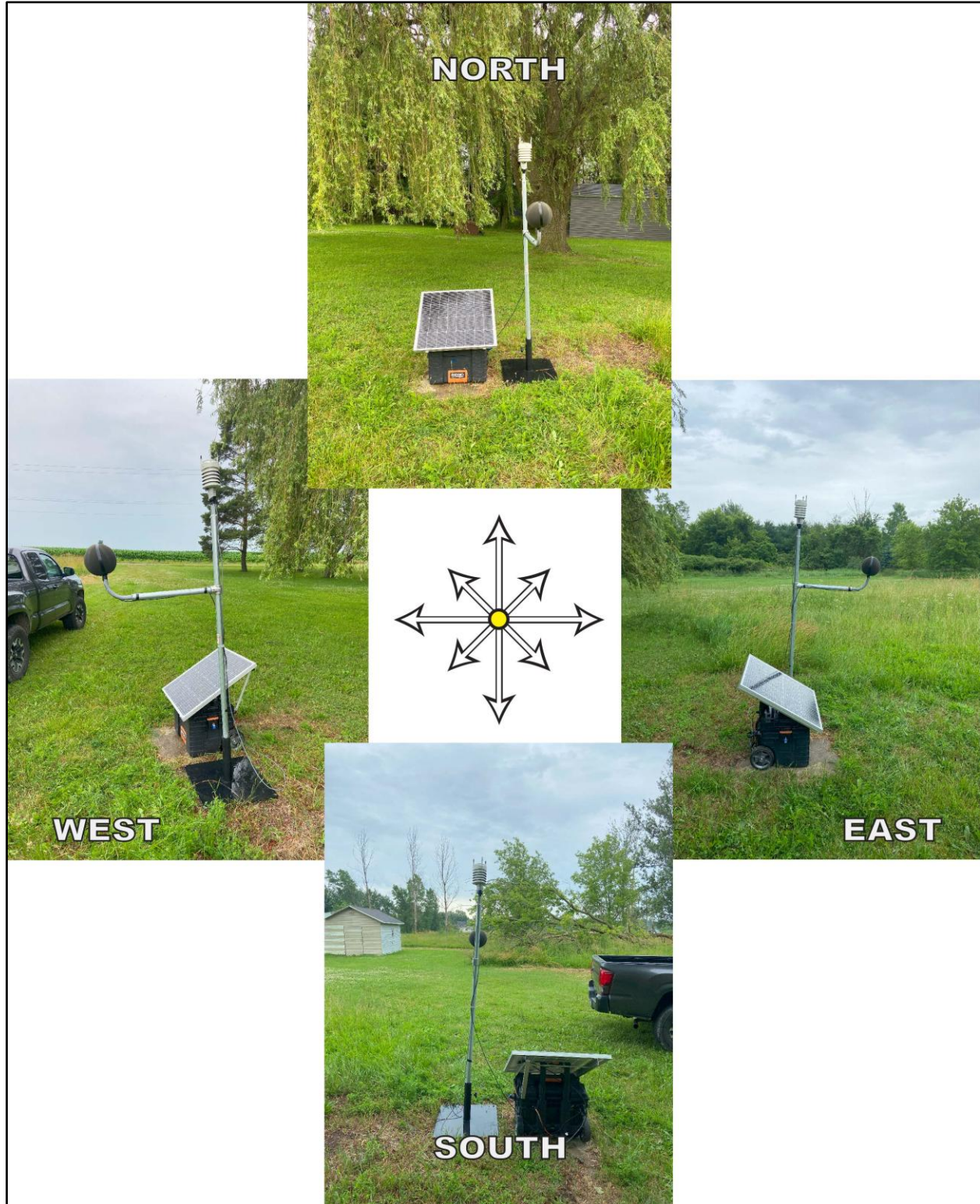


Figure D-8. Photographs of Location Speaker 2

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

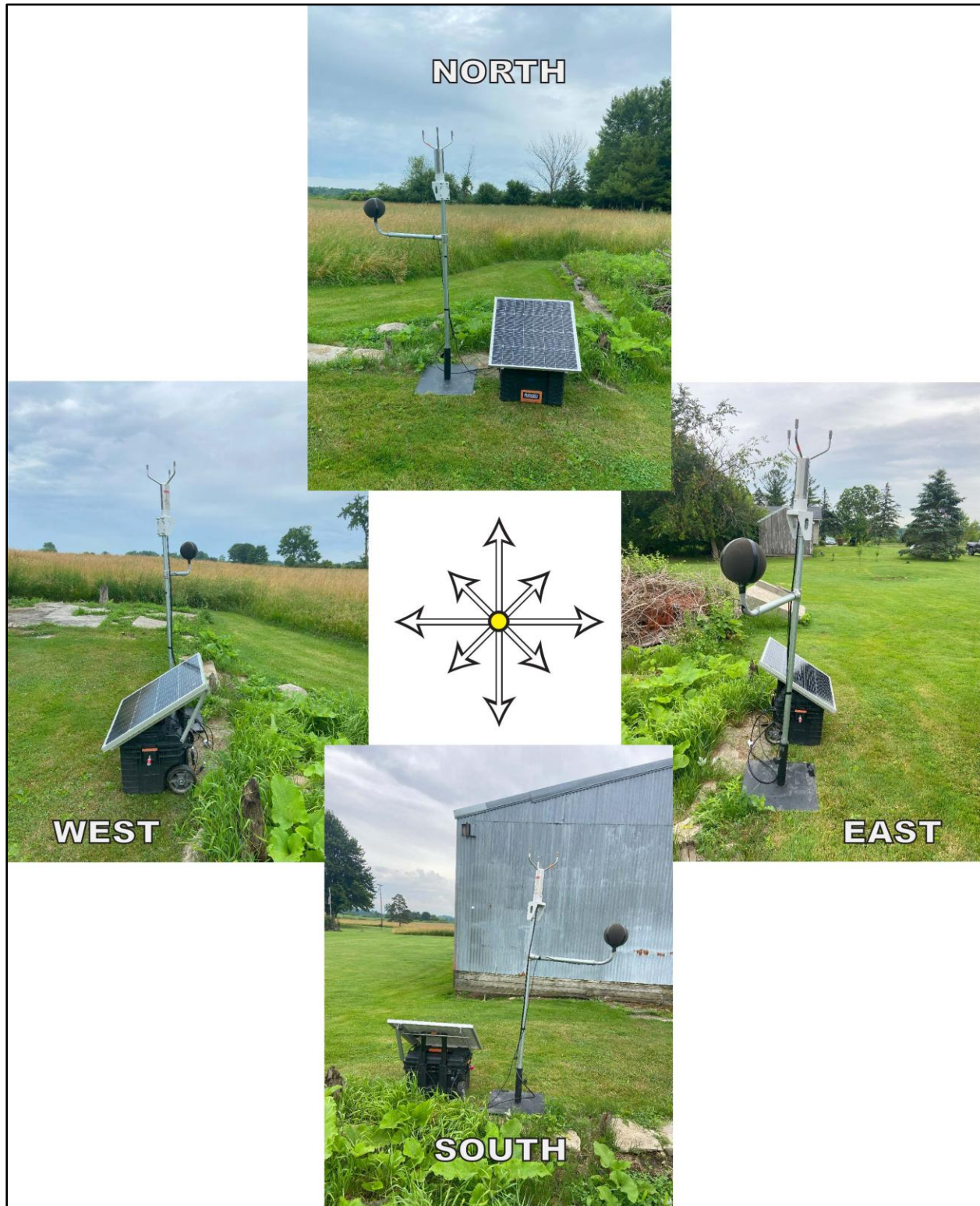


Figure D-9. Photographs of Location Speaker 3

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

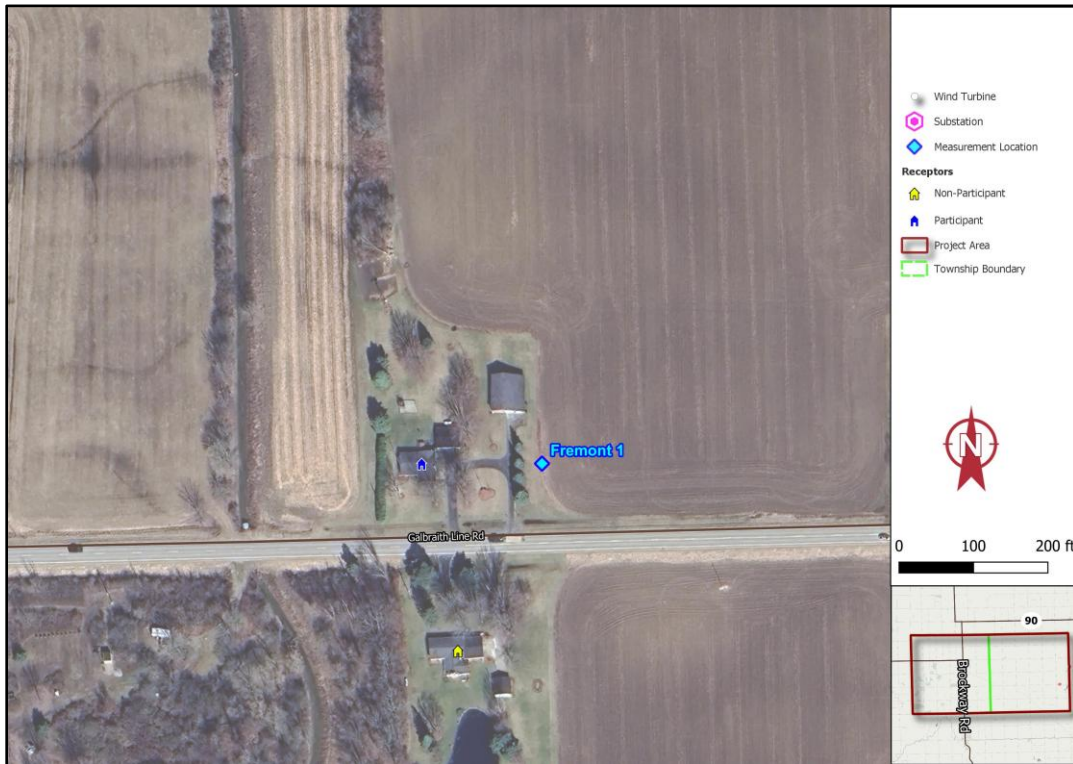


Figure D-10. Measurement Location Fremont 1

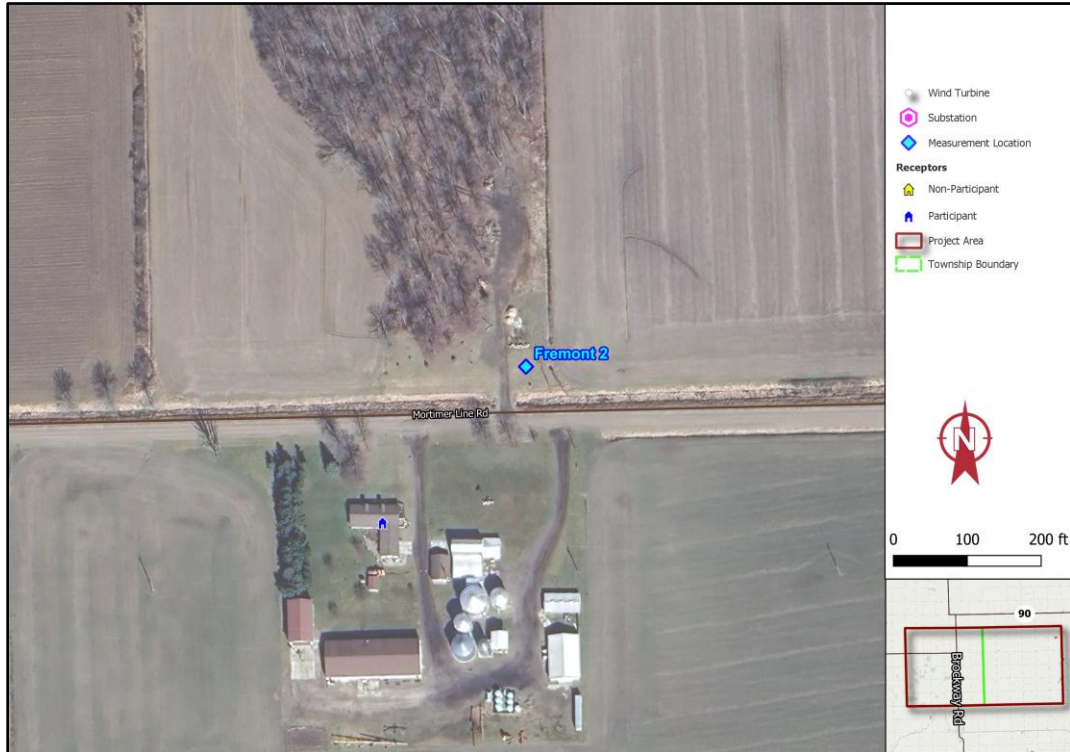


Figure D-11. Measurement Location Fremont 2

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Riverbend Wind Energy Facility

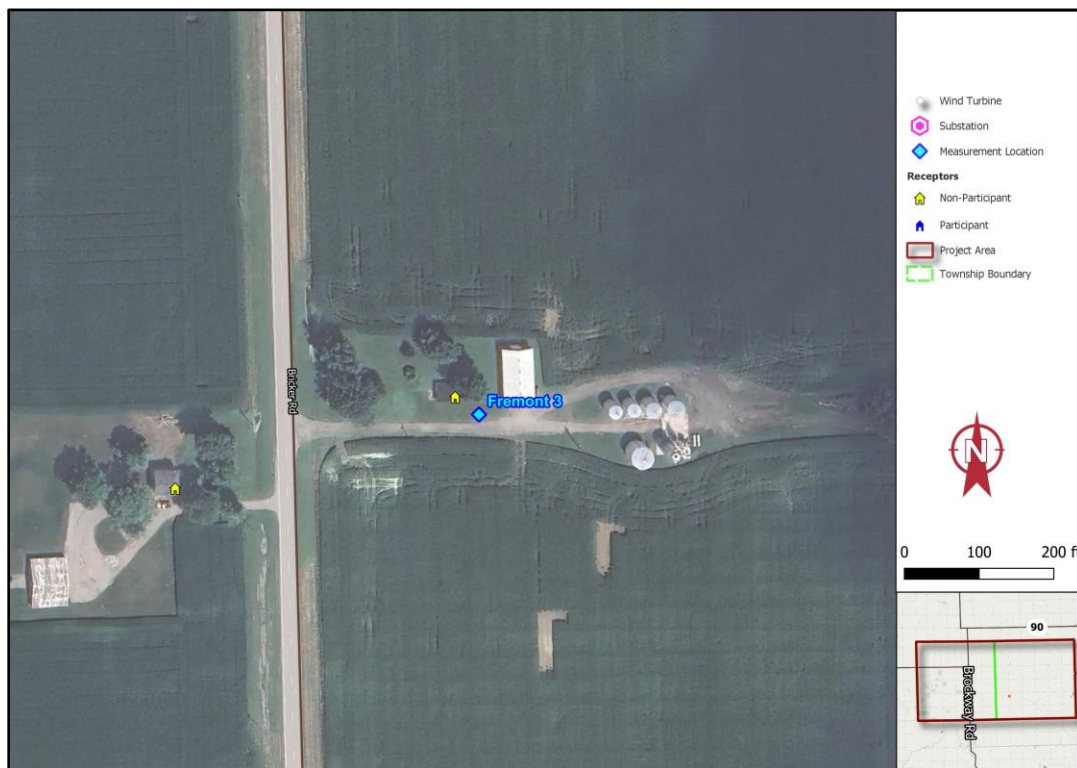


Figure D-12. Measurement Location Fremont 3

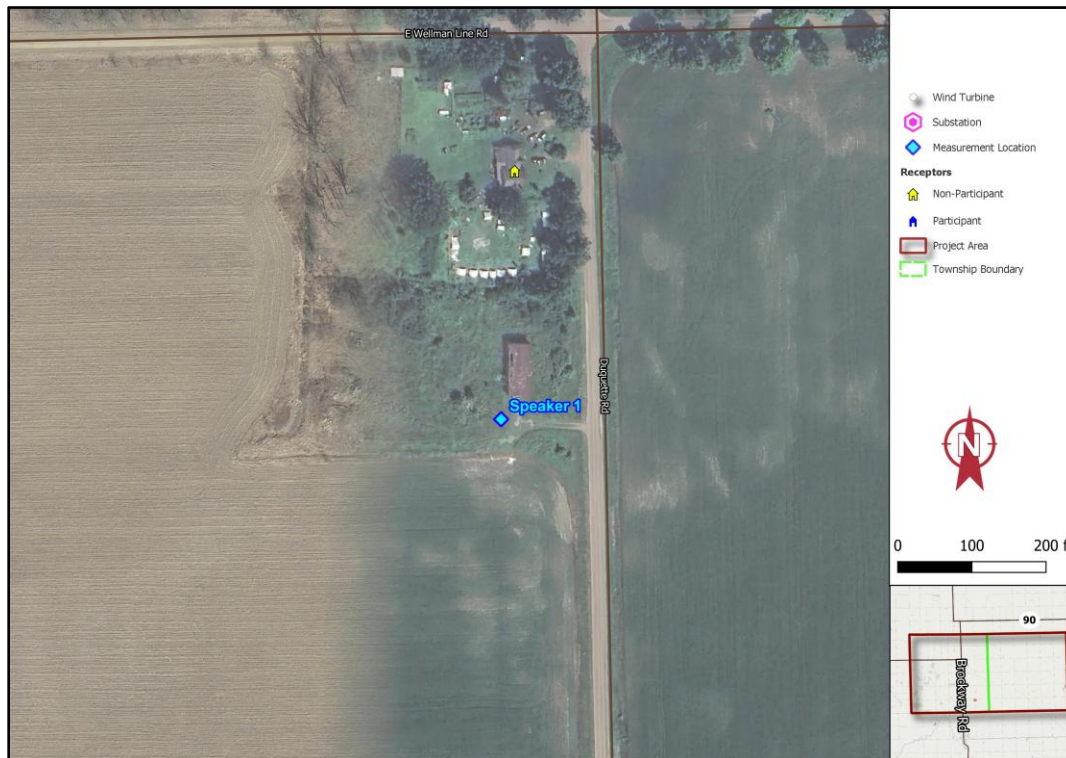


Figure D-13. Measurement Location Speaker 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility



Figure D-14. Measurement Location Speaker 2

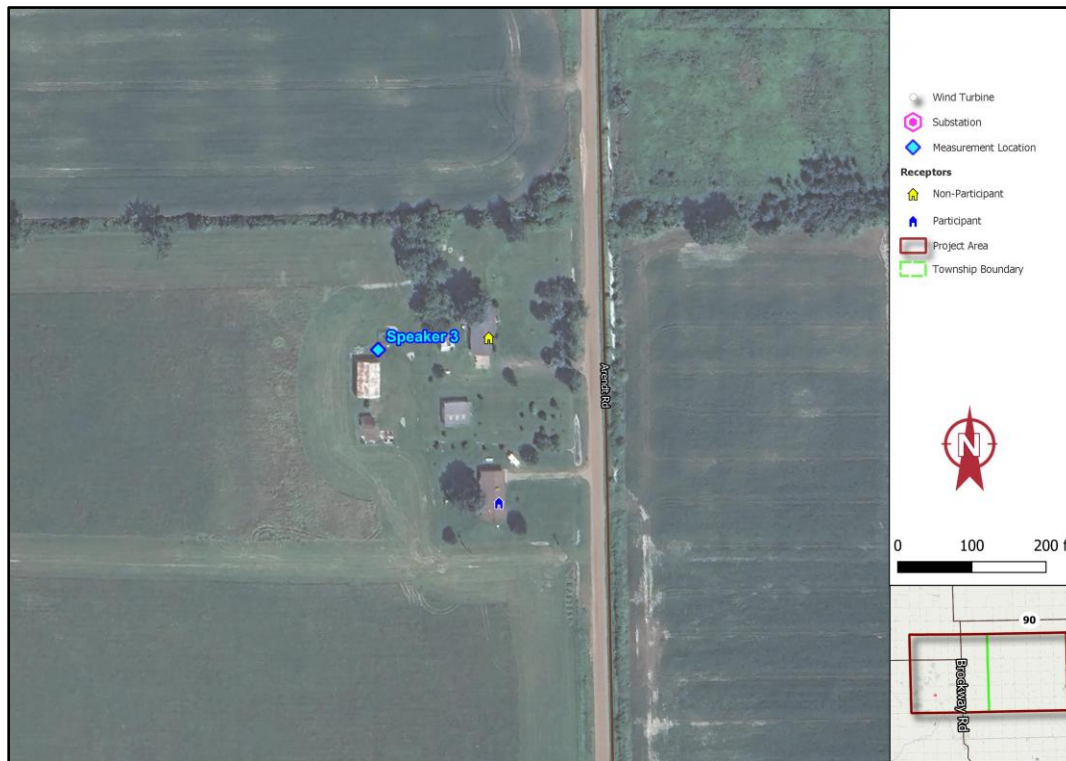


Figure D-15. Measurement Location Speaker 3

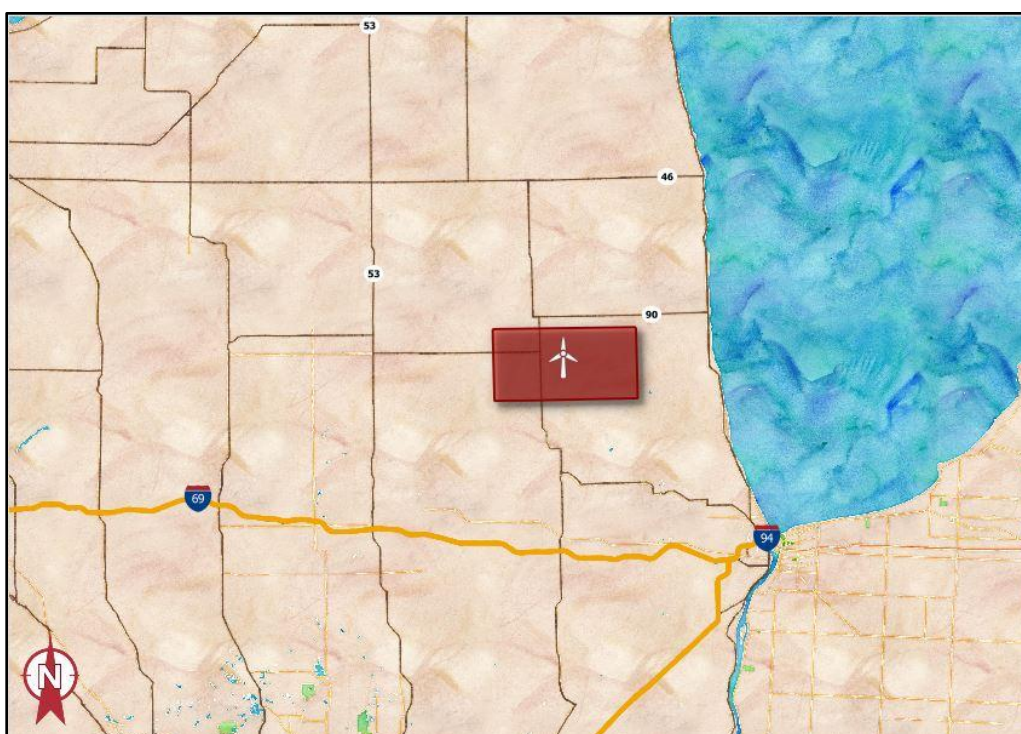
Appendix 1.7-B:
PRE-CONSTRUCTION NOISE ANALYSIS
REPORT (FOR SINGLE TRANSFORMER
PROJECT VARIANT)

Pre-Construction Wind Turbine Noise Analysis

for the proposed

Riverbend Wind Energy Facility

April 21, 2026



Prepared for:

MI Energy Developments, LLC
New York, New York

Prepared by:

Hankard Environmental, Inc.
Verona, Wisconsin



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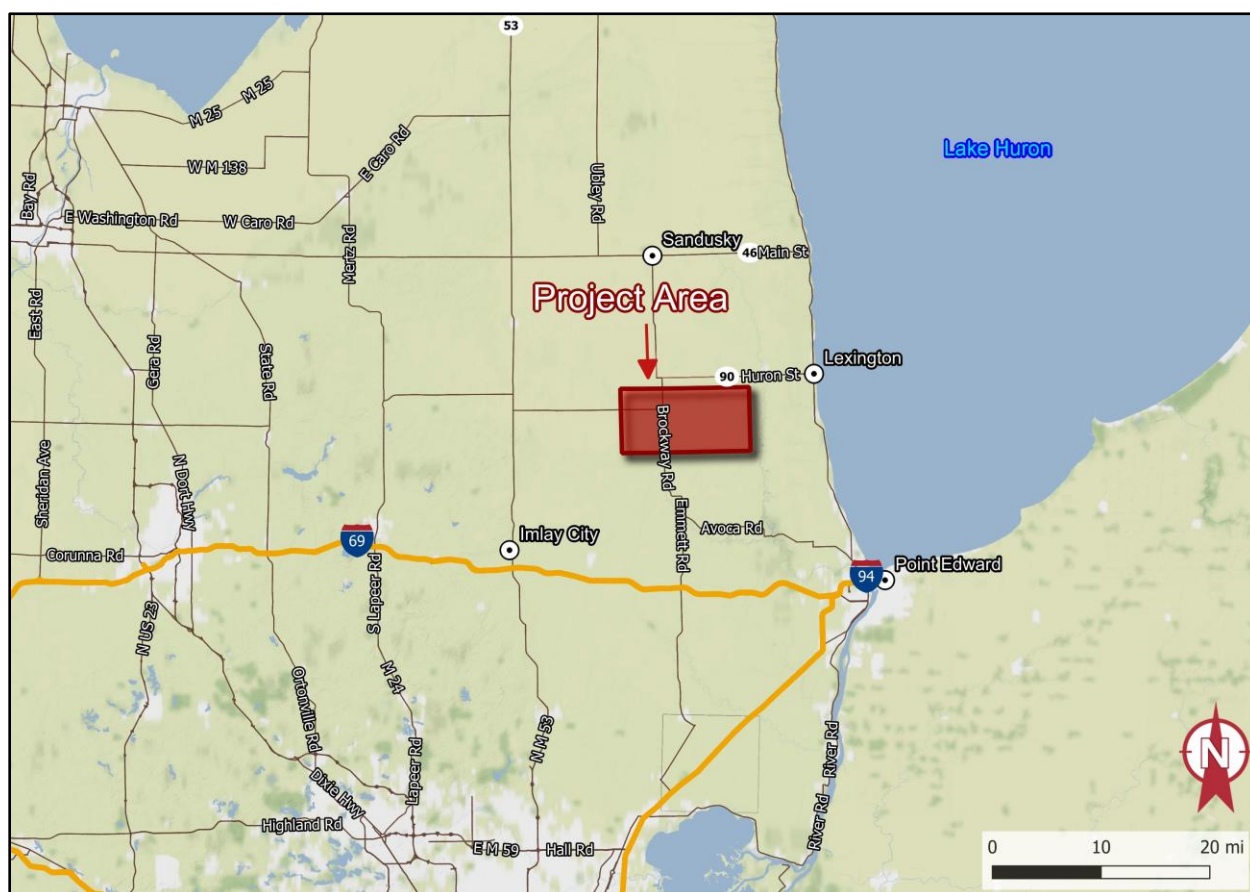
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1. Introduction

This report describes the pre-construction noise analysis conducted by Hankard Environmental for the proposed Riverbend Wind Energy Facility (Project, Facility). The analysis was conducted at the request of the Project proponent, MI Energy Developments, LLC, in support of their application for a Renewable Energy or Storage Siting Certificate under the provisions of Michigan Compiled Laws (MCL) 460.1226(7)(g) Section 226(8) of Act 233. An ambient noise study was also conducted to analyze existing noise levels within and near the Project (Project Area).

The Project is expected to produce up to 300 megawatts (MW) of electric power using 50 wind turbines, all of which are to be located in Sanilac County, Michigan. Also included in the analysis is noise from the Facility substation. Figure 1-1 shows the general location of the Project, which is approximately 60 miles northeast of Detroit, Michigan.

This report describes the applicable noise regulation and implementation methods, the Project and its environs, the methodology and results of the ambient noise study, the data used to predict noise levels, and the results of the noise level predictions demonstrating compliance with the state of Michigan law.



2. Applicable Noise Standards

There are no federal laws or regulations that apply to noise emissions from the Project. The Project is located in Fremont and Speaker Townships in Sanilac County, Michigan. Pursuant to Act 233, local jurisdictions with noise ordinances that are more restrictive than those defined by Michigan Compiled Laws (MCL) 460.1226 are not recognized. The Project is subject to the requirements of MCL 460.1226 Subsection (8)(b)(iv) which states:

The wind energy facility does not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.

On October 10, 2024 the Michigan Public Service Commission (MPSC) issued PA 233 Application Filing Instructions and Procedures, which includes Attachment D - Sound Report Requirements. The Sound Report Requirements include detailed noise level modeling (prediction), measurement, and reporting guidelines. A detailed description of the noise modeling methodology used in this analysis, as it pertains to the requirements listed in the Sound Report Requirements, can be found in Section 4 below.

On October 10, 2024 the MPSC also issued Final Rules U-21547 (Order). The Order describes the following in relation to application requirements and sound modeling guidelines:

1. Minimum Qualifications for Noise Control Engineer: See Section 7, below, for a description of Hankard Environmental's qualification for conducting this noise level assessment.
2. Tonal Prominence Penalty: See Section 5, below, for a full description of Hankard Environmental's tonality assessment. For this noise level analysis, a +5 dB penalty was included in transformer sound power levels but not wind turbine sound power levels, as the turbines' noise emissions are not tonal according to ANSI S12.9 Part 4 (Annex C).
3. Façade Pressure Doubling Method: To account for façade pressure doubling, +6 dB was added to the predicted noise levels presented herein.
4. Pre-construction Sound Monitoring: A pre-construction sound survey was conducted and the results are described in Section 4.
5. Post-construction Monitoring: The required post-construction monitoring is not addressed in this preconstruction noise modeling assessment.

3. Project Description

The Project plans to install 50 wind turbines across Speaker and Fremont Townships in Sanilac County, Michigan, generating up to 300 MW of electric power. This analysis considered five different turbine models, the Vestas V162-6.0 MW turbine with a hub height of 119 meters, the Nordex 169/5.X turbine with a hub height of 112 meters, the Vestas V162-6.8 MW turbine with a hub height of 119 meters, the Vestas V162-7.2 MW turbine with a hub height of 119 meters, and the Vestas V163-4.5 MW turbine with a hub height of 118 meters. All turbines would be equipped with Serrated Trailing Edge (STE) blades. Associated facilities include gravel access roads, underground cabling, and a substation.

The substation includes a 330 megavolt ampere (MVA) step-up transformer. Figure 3-1 shows the locations of the proposed wind turbines and substation. A table of all Project noise source locations and their coordinates is provided in Appendix A.

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

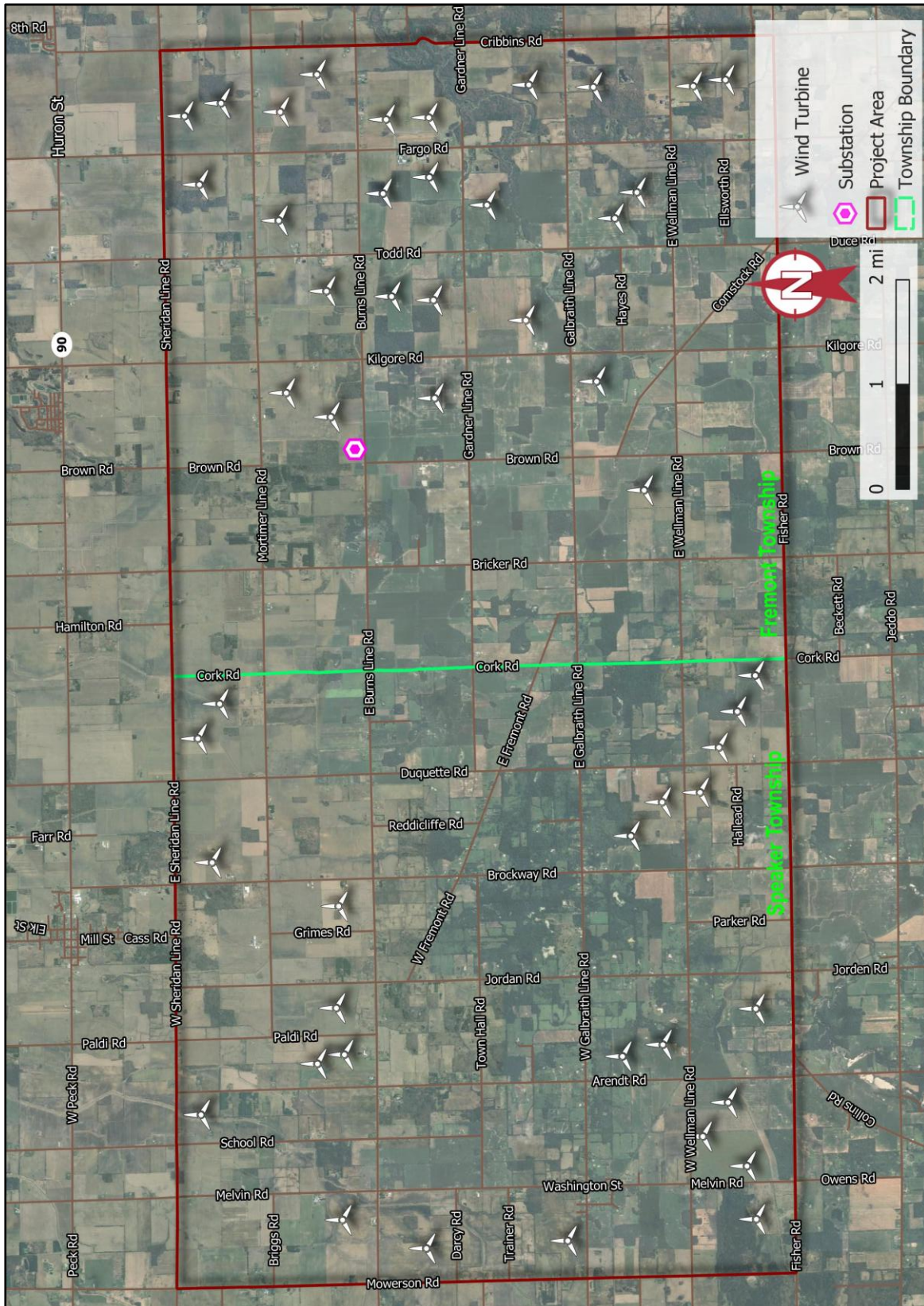


Figure 3-1. Riverbend Wind Energy Facility Layout

4. Ambient Noise Survey

An ambient noise survey was conducted in the Project Area during June and July of 2024. Noise levels were measured at six locations representative of the non-participating noise-sensitive receptors located closest to the Project. Noise measurement locations are shown in Figure 4-1. The measurement points were selected to be representative of rural non-participating residences, both close to and removed from existing sources of noise, which would be most impacted by the Project. A full description of locations, measurement and analysis methodologies, and results are provided in Appendix D.

Sources of existing noise most commonly observed included natural sounds (birds, wind), distant traffic (Galbraith Line Road and Highway 90), and local traffic. Less frequently observed noise sources included agricultural equipment, aircraft overhead, and distant dog barks. The monitors continuously recorded noise levels for 20 full days between June 25 and July 16, 2024. Existing L_{eq} noise levels (mean), during conditions conducive to full turbine operations during daytime and nighttime hours, ranged from 39 to 51 dBA and were primarily correlated with local traffic and wind gusts. Existing L_{90} noise levels during conditions conducive for full turbine operations during daytime and nighttime hours, were typically 30-40 dBA and were strongly correlated with local traffic and average wind conditions. Table 4-1 summarizes the ambient noise levels during conditions conducive to full turbine operations.

Table 4-1. Ambient Hourly Noise Levels During Conditions of Full Turbine Acoustic Emissions

Location	Mean Hourly L_{eq} (dBA)	Mean Hourly L_{10} (dBA)	Mean Hourly L_{50} (dBA)	Mean Hourly L_{90} (dBA)
F1	51	53	42	36
F2	44	46	41	37
F3	41	43	37	32
Fremont Average	45	47	40	35
S1	40	42	37	33
S2	42	44	40	36
S3	39	41	36	32
Speaker Average	40	42	37	34
Site-Wide Average	43	45	39	34

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

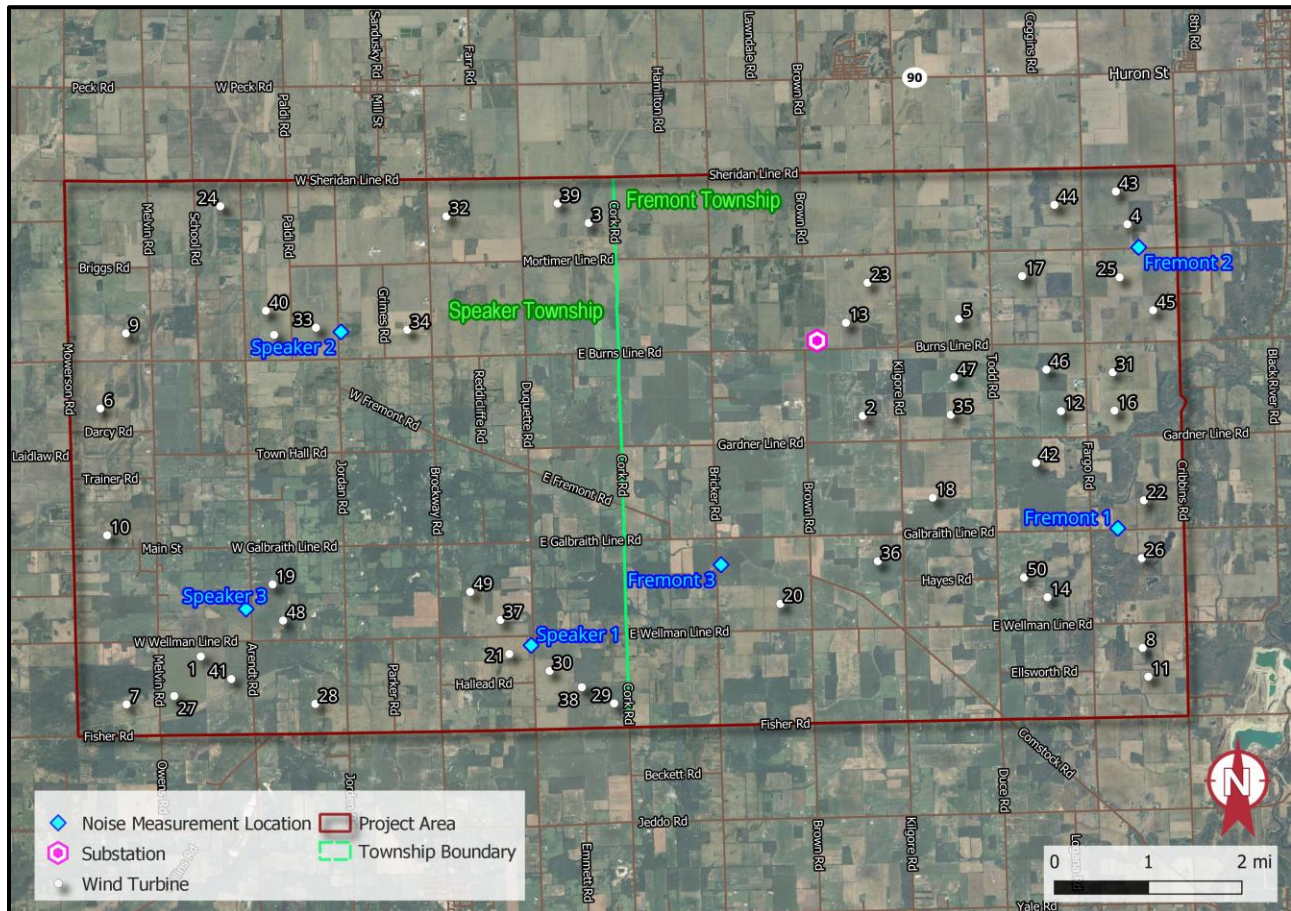


Figure 4-1. Ambient Noise Survey Measurement Locations

5. Noise Modeling Method

Noise levels from the proposed Project were predicted following the guidelines prescribed by the MPSC in PA 233 Application Filing Instructions and Procedures, Sound Report Requirements. Table 5-1, below, lists the noise level modeling requirements for wind, solar, and energy storage facilities set forth in the Sound Report Requirements, and the subsections following Table 5-1 describe how each parameter was applied for this analysis. Noise levels were predicted using the method set forth in International Organization for Standardization (ISO) Standard 9613-2:2024 - *Attenuation of Sound During Propagation Outdoors*. Modeling was implemented using the SoundPLAN v9.1 acoustical modeling program. Figure 5-1 shows a representative three-dimensional view of the SoundPLAN model of the Project.

Table 5-1. Sound Modeling Parameters

Parameter	Value
G (ground factor)	0.0 over water and large areas of hard ground, 0.5 everywhere else
Modeling uncertainty adjustment	Minimum of +2 dB for wind projects, Minimum of +0 dB for all other sources
Receptor/grid height	4.0 m for wind projects, otherwise, • 4.0 m for two- or more-story dwellings (default) • If sound barriers are proposed, the height of the highest window for each dwelling • 1.5 m for property boundaries and one-story dwellings
Source height	For wind turbines, hub height. For all other sources, top of the sound source
Receptors	All dwellings within 1 mile of any facility sound source
Temperature/Humidity	10°C, 70%
Sound power level	See below
Source directivity	For wind turbines, omnidirectional. For all other sources, directionality of sound power may be considered if known.
C _{met} (meteorological adjustment)	0 (none)
Include all sources within	8,000 m
Dense vegetation	No foliage attenuation allowed to be considered outside of Project-controlled parcels
Tonal prominence	+5 dB tonal penalty to source sound power. The tonal penalty can be removed if it can be shown that the facility would not have a tonal prominence at a dwelling when the measured background sound of the lowest hourly L ₉₀ is added.
Façade pressure doubling ¹	+6 dB to modeled free field outer wall sound pressure level
Other energy facilities	Other energy facilities that have an application submitted prior to this facility, approved, or built, within two miles of the facility must be included in a separate cumulative impact model run.

¹ MCL 460.1226 states that the noise limit is considered "at the nearest outer wall of the nearest dwelling." In practice, this would be measured with a microphone mounted directly on the façade, that is, flush mounted on the vertical reflecting surface of a building. The pressure doubling at the surface with respect to the free-field condition leads to a 6 dB increase in sound level and is referred to as the "6-dB position" in ANSI S12.9 Part 3. Sound modeling conducted using ISO 9613-2 does not include the +6 dB adjustment. Therefore, 6 dB must be added to the sound modeling results to reflect what would be measured at the façade.

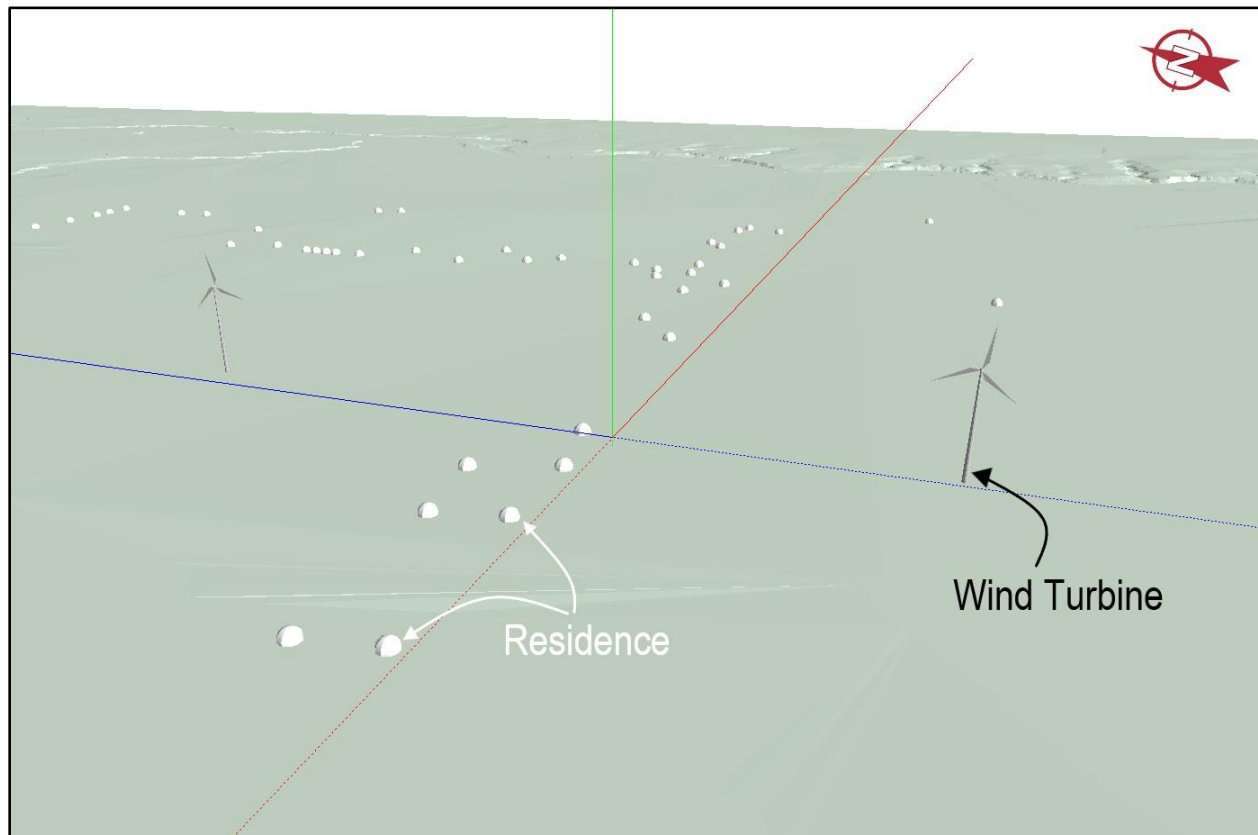


Figure 5-1. Three-Dimensional View of the SoundPLAN Noise Model

Ground Factor

The ground absorption factor was set to 0.5.

Modeling Uncertainty Adjustment

An uncertainty factor of +2 dBA was added to all predicted noise levels.

Receptors / Grid Height

In the SoundPLAN model receptor points were placed at each of the 1,469 residences (including 209 participants and 1,260 non-participants) located within approximately 1.25 miles of any Project noise source. The geographic locations of the receptors were obtained from the Project and are listed in Appendix B. The height of each receptor was set to 4 meters above the ground. Noise level contours were also generated to help graphically illustrate how predicted noise levels vary within the Project area. The height above ground for the noise level contours was also set to 4 meters.

Source Height, Sound Power Level, Source Directivity

In the SoundPLAN model, each turbine was represented as an acoustical point source located at its hub-height propagating equally in all directions. The geographic coordinates, ground elevation, and source height for each turbine and substation transformer, as well as the

transformer size, are listed in Appendix A. The analysis considered five different turbine models, the Vestas V162-6.0 MW turbine with a hub height of 119 meters, the Nordex 169/5.X turbine with a hub height of 112 meters, the Vestas V162-6.8 MW turbine with a hub height of 119 meters, the Vestas V162-7.2 MW turbine with a hub height of 119 meters, and the Vestas V163-4.5 MW turbine with a hub height of 118 meters. All turbines would be equipped with Serrated Trailing Edge (STE) blades. All turbines were assumed to be operating in full, continuous, and normal mode (versus noise-reduction mode).

Table 5-2 lists the overall A-weighted sound power levels used in the model for each source. The noise emission levels of each turbine were provided by the manufacturer and were determined according to International Electrotechnical Commission Standard 61400-11. In accordance with the Sound Report Requirements, this analysis used the sound power levels reported by the manufacturer for a wind speed of 10 m/s at hub height, which is the wind speed at which maximum acoustic emissions occur.

The Project includes a substation that will contain one 330 MVA step-up transformer, which is the only significant noise-producing equipment. The sound power level of the step-up transformer is listed in Table 5-2. The transformer was modeled as a point source located three meters above the ground, with no barriers or directivity reductions. The sound power level of the transformer was estimated based on the procedures outlined in the Institute of Electrical and Electronics Engineers (IEEE) Standard C57.12.90-2021. The transformer was assumed to be tonal, and thus 5 dBA was added to the sound power level to account for this tonality, per the Sound Report Requirements.

Table 5-2. Source Sound Power Levels

Source	Source or Hub Height (meters)	Sound Power Level (dBA)
Vestas V162-6MW STE Blades	119	104.3
Nordex 169/5.X Mode 0 STE Blades	112	106.5
Vestas V162-6.8MW STE Blades	119	103.3
Vestas V162-7.2MW STE Blades	119	104.6
Vestas V163-4.5MW STE Blades	118	106.3
Transformer 330 MVA*	3	110.6

* 5 dBA tonality penalty included

Temperature/Humidity

The air temperature, relative humidity, and atmospheric pressure were set to conditions of 10°C, 70%, and 1 atmosphere, respectively. These values represent the lowest amount of atmospheric absorption of sound available in the ISO 9613-2:2024 method and result in the highest levels of sound reaching the receptors.

C_{met} (Meteorological Adjustment)

No meteorological adjustment was made for this analysis.

Source Range

All sources located within 8,000 meters of a receptor were included in the predictions.

Dense Vegetation

No attenuation due to foliage was considered for this sound level assessment.

Tonal Prominence

The assessment of tonality was conducted by applying the criterion in ANSI S12.9 Part 4 (Annex C) which looks at each one-third octave band noise level and compares it to the average of the levels in the two adjacent bands. If the differences exceed certain thresholds, the noise is considered tonal. The allowable differences are 15 dB from 25 to 125 Hz, 8 dB from 160 to 400 Hz, and 5 dB from 500 to 10,000 Hz. The one-third octave band noise levels provided by the manufacturer of each turbine were analyzed using this standard.

The wind turbines considered for this Project do not have tonal noise emissions according to ANSI S12.9 Part 4, Annex C. However, noise emissions from the Project's substation step-up transformer have the potential to be tonal and for this study are assumed tonal. As a result, 5 dBA was added to the transformer sound power levels, as shown in Table 5-2 above.

Façade Pressure Doubling

In accordance with the Sound Report Requirements, 6 dBA was added to all predicted noise levels to account for façade pressure doubling.

Other Energy Facilities

There are no other energy facilities located within two miles of the Project.

6. Predicted Noise Levels

Noise levels were predicted for the full and continuous operation of the proposed Project for each of five potential wind turbine models. Noise levels were predicted at each of the 1,469 receptors identified within approximately 1.25 miles of any proposed noise source.

- Predicted noise levels for all receptors are at or below the 55 dBA limit set forth in MCL 460.1226.
 - For the Vestas V162-6.0MW turbines with STE blades, predicted noise levels at non-participating receptors range from 35 to 52 dBA (L_{eq}).
 - For the Nordex 169/5.X turbines with STE blades, predicted noise levels at non-participating receptors range from 37 to 54 dBA (L_{eq}).
 - For the Vestas V162-6.8MW turbines with STE blades, predicted noise levels at non-participating receptors range from 35 to 51 dBA (L_{eq}).
 - For the Vestas V162-7.2MW turbines with STE blades, predicted noise levels at non-participating receptors range from 36 to 52 dBA (L_{eq}).
 - For the Vestas V163-4.5MW turbines with STE blades, predicted noise levels at non-participating receptors range from 38 to 54 dBA (L_{eq}).
 - Table 6-1 lists the predicted noise level at the loudest 15 non-participating receptors. The predicted noise levels at all receptor locations, for each turbine type, are listed in Appendix B.
- Figure 6-1 shows the results of the noise level predictions in the form of noise level contours. The areas between turbines and the 55 dBA L_{eq} noise level contours have predicted levels above 55 dBA. Those areas outside of the contours have a predicted noise level less than 55 dBA. More detailed noise level contour figures showing receptors are provided in Appendix C.
- Near the Project substation, predicted noise levels at non-participating receptors are less than 55 dBA, provided the step-up transformer procured by the Project has a sound power level less than or equal to the value shown in Table 5-2.
- Note that this analysis represents the very highest wind turbine noise levels expected. The noise level prediction method prescribed by the MPSC is consistent with that described by ANSI/ACP Standard 111-1 (2022): *Wind Turbine Sound Modeling*. This noise level prediction method has been validated by Hankard Environmental and other researchers and shown to overpredict measured levels by 1 to 2 dBA.
- Finally, a majority of the time wind turbine noise levels will be less than those described herein when the turbines are not producing full acoustic output due to low winds, and/or atmospheric conditions not being as conducive to sound propagation as assumed herein (e.g., unstable atmosphere, receptors crosswind to the nearest turbines).

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

Table 6-1. Highest Predicted Noise Levels at Non-Participating Receptors

Receiver	Predicted Noise Level (dBA)				
	Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2426	52	54	51	52	54
R-2797	51	53	51	52	53
R-3597	51	53	51	52	53
R-1474	51	53	50	51	53
R-3420	50	52	50	51	53
R-0219	50	52	50	51	52
R-1266	50	52	50	51	52
R-2798	50	52	50	51	52
R-2427	50	52	49	51	52
R-2698	50	52	49	51	52
R-2519	50	52	49	51	52
R-2096	50	52	49	50	52
R-4346	50	52	49	50	52
R-4173	50	51	49	50	52
R-1430	50	52	49	50	52



7. Qualifications

All aspects of this study were either conducted by or directly overseen by Mr. Michael Hankard, who is the founder and owner of Hankard Environmental, Inc. Mr. Hankard has 35 years of acoustical consulting experience. He has conducted hundreds of noise measurement surveys for projects in the electrical power generation, mining, transportation, and other industries. He holds a B.S.E.E. degree from the University of Maine with a specialization in acoustics and is a full member of the Institute of Noise Control Engineering (INCE) and the Acoustical Society of America (ASA). His entire career has been dedicated to the measurement, analysis, mitigation, and compliance assessment of environmental noise.

Mr. Hankard was a member of the committee that developed the American National Standards Institute (ANSI) and American Clean Power (ACP) standard ACP 111-1 (2022), *Wind Turbine Sound Modeling*, and he is currently participating in the process to develop a national standard for the prediction of noise from energy storage projects.

APPENDIX A

Project Noise Source Locations

Table A-1. Noise Source Locations

Source Name	UTM 17N		Ground Elevation (m asl)	Source / Hub Height – Vestas V162-6MW (m agl)	Source / Hub Height – Nordex (m agl)	Source / Hub Height – Vestas V162-6.8MW (m agl)	Source / Hub Height – Vestas V162-7.2MW (m agl)	Source / Hub Height – Vestas V163-4.5MW (m agl)
	Easting (m)	Northin g (m)						
1	349477	4781358	245	119	112	119	119	118
2	360829	4785484	230	119	112	119	119	118
3	356129	4788790	235	119	112	119	119	118
4	365366	4788768	226	119	112	119	119	118
5	362476	4787146	230	119	112	119	119	118
6	347755	4785610	242	119	112	119	119	118
7	348205	4780537	245	119	112	119	119	118
8	365628	4781507	225	119	112	119	119	118
9	348194	4786899	240	119	112	119	119	118
10	347873	4783436	246	119	112	119	119	118
11	365725	4781012	225	119	112	119	119	118
12	364228	4785565	225	119	112	119	119	118
13	360540	4787080	230	119	112	119	119	118
14	363996	4782374	226	119	112	119	119	118
15	350735	4786871	245	119	112	119	119	118
16	365145	4785573	225	119	112	119	119	118
17	363562	4787881	230	119	112	119	119	118
18	362028	4784081	227	119	112	119	119	118
19	350709	4782594	250	119	112	119	119	118
20	359415	4782262	230	119	112	119	119	118
21	354768	4781402	245	119	112	119	119	118
22	365649	4784035	225	119	112	119	119	118
23	360910	4787766	230	119	112	119	119	118
24	349811	4789076	236	119	112	119	119	118
25	365232	4787858	226	119	112	119	119	118
26	365614	4783044	229	119	112	119	119	118
27	349022	4780680	245	119	112	119	119	118
28	351442	4780545	255	119	112	119	119	118
29	356566	4780553	237	119	112	119	119	118
30	355459	4781111	245	119	112	119	119	118
31	365116	4786230	225	119	112	119	119	118
32	353690	4788905	240	119	112	119	119	118

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Source Name	UTM 17N		Ground Elevation (m asl)	Source / Hub Height – Vestas V162-6MW (m agl)	Source / Hub Height - Nordex (m agl)	Source / Hub Height – Vestas V162-6.8MW (m agl)	Source / Hub Height – Vestas V162-7.2MW (m agl)	Source / Hub Height – Vestas V163-4.5MW (m agl)
	Easting (m)	Northin g (m)						
33	351452	4786995	244	119	112	119	119	118
34	353018	4786959	245	119	112	119	119	118
35	362338	4785502	229	119	112	119	119	118
36	361087	4782993	229	119	112	119	119	118
37	354618	4781985	246	119	112	119	119	118
38	356012	4780830	240	119	112	119	119	118
39	355595	4789124	235	119	112	119	119	118
40	350594	4787286	241	119	112	119	119	118
41	350001	4780971	245	119	112	119	119	118
42	363801	4784679	225	119	112	119	119	118
43	365168	4789330	227	119	112	119	119	118
44	364114	4789101	230	119	112	119	119	118
45	365807	4787294	225	119	112	119	119	118
46	363977	4786278	228	119	112	119	119	118
47	362394	4786145	229	119	112	119	119	118
48	350889	4781974	250	119	112	119	119	118
49	354098	4782466	250	119	112	119	119	118
50	363595	4782713	227	119	112	119	119	118
Transformer	360067	4786772	232	3	3	3	3	3

APPENDIX B

Receptor Locations and Predicted Noise Levels

Table B-1. Receptor Locations and Predicted Noise Levels

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0016	Non-Participating	350137	4786266	257	253	45	47	44	46	47
R-0017	Non-Participating	348691	4785731	245	241	43	45	43	44	46
R-0018	Non-Participating	348517	4784520	248	244	42	44	41	43	44
R-0019	Non-Participating	351788	4786212	249	245	45	47	44	46	47
R-0020	Non-Participating	353424	4785206	248	244	39	41	39	40	41
R-0021	Non-Participating	353512	4785201	247	243	39	40	38	40	41
R-0027	Non-Participating	365196	4791166	231	227	38	40	38	39	40
R-0032	Participating	357658	4788122	241	237	40	41	40	41	42
R-0035	Non-Participating	347471	4783245	250	246	48	50	48	49	50
R-0036	Non-Participating	351106	4783133	258	254	46	48	45	47	48
R-0039	Non-Participating	354998	4783345	248	244	42	44	42	43	44
R-0041	Non-Participating	362825	4783523	229	225	46	47	45	46	48
R-0042	Non-Participating	363212	4781949	233	229	46	47	45	46	48
R-0054	Non-Participating	353367	4789640	255	251	43	45	43	44	45
R-0055	Non-Participating	353519	4786113	245	241	42	44	42	43	44
R-0056	Non-Participating	353514	4785282	246	242	39	41	39	40	41
R-0057	Non-Participating	353509	4785815	245	241	40	42	40	41	43
R-0066	Non-Participating	366359	4784407	231	227	45	47	44	46	47
R-0070	Participating	349201	4781567	249	245	52	54	51	52	54
R-0071	Non-Participating	351893	4783334	259	255	41	43	41	42	44
R-0074	Non-Participating	350503	4778814	244	240	38	40	38	39	41
R-0075	Non-Participating	350504	4778859	244	240	38	40	38	39	41
R-0079	Non-Participating	366100	4783585	229	225	48	50	47	48	50
R-0088	Non-Participating	349417	4785936	250	246	42	44	41	43	44
R-0089	Non-Participating	352214	4786488	249	245	45	47	45	46	47
R-0090	Participating	353374	4786943	249	245	50	52	49	51	52
R-0102	Non-Participating	357278	4790429	239	235	37	39	37	38	39
R-0103	Participating	355014	4788288	240	236	44	45	43	44	46
R-0104	Participating	359903	4785519	234	230	47	48	47	48	48
R-0105	Non-Participating	350113	4783287	259	255	44	46	43	44	46
R-0106	Non-Participating	348806	4782497	252	248	43	45	43	44	45
R-0107	Non-Participating	350960	4784261	254	250	40	42	40	41	42
R-0108	Participating	353519	4781946	254	250	46	48	45	46	48
R-0109	Non-Participating	348960	4779142	253	249	40	42	40	41	43
R-0111	Non-Participating	352855	4780101	247	243	40	42	40	41	43
R-0112	Non-Participating	352835	4780481	248	244	41	43	41	42	43
R-0113	Non-Participating	355226	4779412	249	245	41	42	40	41	43
R-0124	Non-Participating	348484	4789316	243	239	39	41	38	40	41
R-0129	Non-Participating	353264	4789581	259	255	43	45	43	44	46
R-0130	Non-Participating	350205	4786315	254	250	46	48	45	46	48
R-0144	Non-Participating	359511	4788146	239	235	45	46	45	45	46
R-0146	Non-Participating	362512	4789644	235	231	41	42	40	42	43
R-0147	Non-Participating	364593	4790699	234	230	40	42	40	41	43
R-0148	Non-Participating	361516	4784479	234	230	47	49	47	48	50
R-0149	Participating	365714	4786715	229	225	49	51	48	49	51
R-0150	Non-Participating	348665	4784216	249	245	42	44	41	43	44
R-0152	Non-Participating	352874	4783218	259	255	41	43	40	42	43
R-0153	Non-Participating	348949	4779170	252	248	41	42	40	41	43
R-0155	Non-Participating	352245	4779944	254	250	42	44	42	43	44
R-0157	Participating	360400	4783403	234	230	45	47	44	46	47
R-0158	Non-Participating	362504	4782633	234	230	44	46	44	45	46
R-0165	Non-Participating	352495	4790389	249	245	36	38	36	37	39
R-0168	Non-Participating	349317	4784530	249	245	40	42	40	41	43
R-0177	Non-Participating	356710	4788192	239	235	44	45	43	44	46
R-0181	Participating	365502	4788308	229	225	51	53	50	51	53
R-0182	Non-Participating	363472	4786773	234	230	48	50	48	49	50
R-0184	Non-Participating	366838	4784561	234	230	42	44	41	43	44
R-0186	Non-Participating	346042	4783981	248	244	37	38	36	38	39

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0190	Non-Participating	356118	4778615	243	239	37	39	37	38	40
R-0206	Non-Participating	352585	4790302	249	245	37	39	37	38	39
R-0208	Non-Participating	348686	4786209	249	245	45	46	44	45	47
R-0209	Non-Participating	347279	4786179	244	240	45	47	44	45	47
R-0210	Non-Participating	351809	4785439	255	251	41	43	40	42	43
R-0218	Non-Participating	359299	4788175	240	236	44	45	44	45	45
R-0219	Non-Participating	361344	4787687	234	230	50	52	50	51	52
R-0222	Non-Participating	350062	4783176	259	255	44	46	44	45	46
R-0223	Non-Participating	350279	4783288	259	255	44	46	44	45	47
R-0224	Non-Participating	352169	4783135	259	255	41	43	41	42	43
R-0225	Non-Participating	358339	4781145	239	235	40	42	39	41	42
R-0236	Non-Participating	350812	4790347	243	239	37	39	37	38	40
R-0237	Participating	349326	4787966	244	240	43	45	42	43	45
R-0241	Non-Participating	353445	4790305	249	245	39	40	38	39	41
R-0242	Non-Participating	353696	4789561	251	247	45	47	44	46	47
R-0243	Non-Participating	350253	4784495	254	250	40	41	39	41	42
R-0261	Non-Participating	354858	4790826	239	235	37	39	37	38	40
R-0262	Non-Participating	357209	4789617	244	240	40	42	40	41	42
R-0263	Non-Participating	357380	4790203	239	235	37	39	37	38	40
R-0267	Non-Participating	363044	4785163	230	226	48	50	47	49	50
R-0269	Non-Participating	351496	4783352	259	255	42	44	42	43	45
R-0271	Non-Participating	349037	4779011	254	250	40	41	39	41	42
R-0272	Non-Participating	352072	4779693	255	251	41	43	41	42	44
R-0273	Non-Participating	362582	4783338	230	226	45	47	45	46	48
R-0274	Non-Participating	362226	4782622	234	230	44	46	43	45	46
R-0276	Non-Participating	365793	4782578	233	229	49	51	48	49	51
R-0277	Non-Participating	367509	4782028	226	222	39	40	38	40	41
R-0279	Non-Participating	365409	4780277	229	225	44	46	44	45	46
R-0291	Non-Participating	350306	4789557	242	238	44	46	44	45	47
R-0295	Non-Participating	353015	4789415	259	255	43	45	42	44	45
R-0307	Non-Participating	366654	4785039	229	225	42	44	42	43	45
R-0308	Participating	350304	4782109	250	246	49	51	48	50	51
R-0309	Non-Participating	353604	4782729	256	252	47	49	46	48	49
R-0310	Non-Participating	352639	4781599	249	245	42	44	42	43	44
R-0312	Participating	351572	4780098	255	251	48	50	47	49	50
R-0313	Non-Participating	352733	4779945	245	241	40	42	40	41	43
R-0316	Non-Participating	358091	4783350	237	233	39	41	39	40	41
R-0317	Participating	356645	4780178	239	235	50	52	49	51	52
R-0329	Non-Participating	353959	4790808	239	235	37	38	36	38	39
R-0330	Non-Participating	353397	4789449	254	250	46	47	45	46	48
R-0331	Non-Participating	353266	4789501	259	255	44	46	43	45	46
R-0333	Non-Participating	350086	4786354	259	255	45	47	45	46	47
R-0346	Participating	363915	4788356	234	230	49	51	48	49	51
R-0348	Non-Participating	364586	4787178	231	227	48	49	47	48	50
R-0349	Non-Participating	362993	4785277	230	226	48	50	48	49	51
R-0352	Non-Participating	348743	4783136	259	255	43	45	43	44	46
R-0353	Non-Participating	348422	4779914	249	245	46	48	46	47	49
R-0354	Non-Participating	354874	4783227	249	245	43	45	43	44	45
R-0355	Participating	360858	4783485	234	230	48	50	47	48	50
R-0356	Non-Participating	358204	4781735	239	235	41	42	40	41	43
R-0357	Non-Participating	366946	4783599	230	226	42	43	41	43	44
R-0383	Non-Participating	361215	4789628	238	234	40	41	40	41	42
R-0388	Participating	349118	4783284	259	255	42	44	42	43	44
R-0389	Non-Participating	353817	4783193	254	250	45	46	44	45	47
R-0391	Participating	355263	4780620	249	245	49	51	49	50	51
R-0392	Non-Participating	364559	4783477	229	225	46	48	45	47	48
R-0393	Non-Participating	366489	4780701	227	223	44	46	43	45	46
R-0417	Non-Participating	346063	4783129	249	245	36	38	36	38	39
R-0419	Non-Participating	348486	4783250	253	249	46	48	45	46	48

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0420	Non-Participating	353588	4783723	253	249	41	42	40	42	43
R-0422	Non-Participating	354468	4783236	250	246	44	46	44	45	47
R-0424	Non-Participating	356919	4781121	242	238	47	49	46	47	49
R-0425	Non-Participating	355744	4780043	245	241	46	48	45	47	48
R-0428	Non-Participating	366578	4781887	229	225	44	46	43	44	46
R-0436	Non-Participating	350937	4788063	244	240	45	47	45	46	48
R-0437	Participating	348118	4786454	244	240	49	51	48	49	51
R-0438	Non-Participating	354315	4786156	244	240	39	41	39	40	42
R-0452	Non-Participating	363144	4787475	234	230	49	51	48	50	51
R-0453	Non-Participating	351801	4782725	261	257	43	45	43	44	46
R-0454	Non-Participating	353514	4783083	259	255	44	46	43	45	46
R-0455	Participating	352712	4780919	249	245	42	44	41	43	44
R-0458	Participating	361588	4782451	230	226	45	47	44	46	47
R-0469	Non-Participating	347299	4784740	244	240	42	44	42	43	45
R-0470	Non-Participating	347308	4784769	244	240	43	45	42	43	45
R-0471	Non-Participating	351859	4787636	246	242	46	48	45	46	48
R-0472	Non-Participating	352029	4785815	251	247	42	44	42	43	44
R-0473	Participating	354203	4785741	244	240	39	40	38	40	41
R-0484	Non-Participating	357660	4789649	240	236	38	40	38	39	41
R-0486	Non-Participating	363003	4790148	234	230	40	42	40	41	43
R-0487	Non-Participating	366252	4788549	229	225	45	47	45	46	48
R-0489	Non-Participating	363067	4787160	234	230	49	51	48	49	51
R-0491	Non-Participating	367061	4785221	229	225	40	42	40	41	43
R-0494	Non-Participating	348471	4783231	253	249	46	48	45	46	48
R-0495	Non-Participating	352048	4781681	253	249	43	45	43	44	46
R-0496	Non-Participating	352082	4778729	244	240	37	39	37	38	39
R-0497	Participating	361290	4781978	234	230	42	44	42	43	45
R-0510	Non-Participating	349270	4790694	239	235	36	38	36	37	38
R-0514	Non-Participating	352587	4790348	249	245	37	39	36	38	39
R-0515	Non-Participating	354368	4788162	244	240	43	45	42	44	45
R-0516	Non-Participating	348598	4786333	249	245	46	48	45	46	48
R-0517	Non-Participating	353459	4785278	247	243	39	41	39	40	41
R-0536	Non-Participating	362370	4789718	236	232	40	42	40	41	42
R-0537	Non-Participating	367278	4788120	229	225	40	42	40	41	43
R-0538	Non-Participating	362844	4785155	231	227	49	51	48	49	51
R-0539	Non-Participating	367097	4785140	229	225	40	42	40	41	43
R-0541	Non-Participating	348545	4782847	256	252	44	45	43	44	46
R-0542	Participating	350145	4783657	254	250	42	44	41	43	44
R-0543	Non-Participating	353595	4783091	259	255	44	46	44	45	47
R-0544	Non-Participating	347776	4779957	249	245	45	47	44	45	47
R-0545	Non-Participating	348874	4779394	249	245	42	44	41	43	44
R-0549	Non-Participating	362794	4781920	234	230	43	45	43	44	46
R-0551	Non-Participating	366610	4781883	229	225	43	45	43	44	46
R-0552	Non-Participating	366320	4782076	229	225	45	47	44	46	47
R-0567	Non-Participating	353357	4788291	247	243	45	47	44	46	47
R-0568	Participating	349437	4785298	249	245	40	42	40	41	43
R-0569	Non-Participating	352282	4786353	249	245	44	46	44	45	47
R-0582	Non-Participating	354283	4783708	249	245	41	43	41	42	44
R-0583	Non-Participating	353652	4781021	250	246	43	45	43	44	46
R-0584	Non-Participating	353654	4781230	251	247	44	46	44	45	46
R-0590	Participating	365477	4783576	231	227	50	52	49	51	52
R-0603	Non-Participating	350984	4789593	244	240	40	42	39	41	42
R-0604	Non-Participating	352917	4785568	249	245	40	42	40	41	43
R-0619	Non-Participating	353699	4783231	256	252	44	46	43	44	46
R-0620	Non-Participating	352334	4779938	252	248	42	43	41	42	44
R-0623	Participating	359914	4781721	234	230	44	46	44	45	47
R-0626	Non-Participating	363015	4781526	234	230	42	44	42	43	45
R-0628	Non-Participating	366386	4779721	226	222	39	41	38	40	41
R-0629	Non-Participating	366071	4780197	229	225	43	45	42	44	45

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0630	Non-Participating	367144	4780322	225	221	38	40	38	39	41
R-0644	Participating	353300	4789305	251	247	46	48	46	47	49
R-0645	Non-Participating	350133	4787814	244	240	46	48	46	47	49
R-0658	Non-Participating	360460	4784996	234	230	48	49	47	48	49
R-0659	Non-Participating	367341	4788441	229	225	39	41	39	40	42
R-0660	Non-Participating	363036	4784528	230	226	47	49	47	48	49
R-0661	Non-Participating	364766	4784347	229	225	47	49	46	47	49
R-0664	Non-Participating	353320	4783350	259	255	42	43	41	42	44
R-0665	Non-Participating	347415	4780627	249	245	44	46	43	44	46
R-0666	Non-Participating	348909	4779749	249	245	45	46	44	45	47
R-0667	Non-Participating	358424	4783366	236	232	40	42	40	41	42
R-0668	Non-Participating	358332	4783505	237	233	39	41	39	40	42
R-0670	Non-Participating	364850	4780177	230	226	41	43	41	42	44
R-0694	Non-Participating	351952	4785593	254	250	41	43	41	42	44
R-0714	Participating	362903	4788587	234	230	45	47	44	46	47
R-0718	Non-Participating	348649	4782834	258	254	43	45	43	44	46
R-0721	Participating	355438	4781672	249	245	50	52	49	50	52
R-0722	Non-Participating	358439	4782080	236	232	42	44	42	43	44
R-0725	Participating	365609	4783498	231	227	51	53	50	51	53
R-0726	Non-Participating	367189	4783199	229	225	40	42	40	41	43
R-0741	Non-Participating	352472	4789622	250	246	39	41	39	40	42
R-0742	Non-Participating	352497	4786393	249	245	45	47	44	46	47
R-0754	Non-Participating	354824	4787148	244	240	40	41	39	41	42
R-0755	Non-Participating	362783	4789633	235	231	41	43	41	42	44
R-0757	Non-Participating	363007	4786866	234	230	49	51	48	50	51
R-0758	Non-Participating	366585	4786825	226	222	44	46	44	45	47
R-0759	Non-Participating	365805	4786702	229	225	49	50	48	49	51
R-0760	Non-Participating	366932	4786826	224	220	42	44	42	43	45
R-0761	Participating	348415	4783184	254	250	46	48	45	47	48
R-0762	Non-Participating	348745	4783232	258	254	43	45	43	44	46
R-0764	Participating	361458	4783489	234	230	48	50	47	48	50
R-0787	Non-Participating	353721	4789493	249	245	46	48	45	47	48
R-0788	Non-Participating	350166	4787427	244	240	50	52	49	50	52
R-0789	Non-Participating	351753	4786189	249	245	45	47	44	45	47
R-0790	Non-Participating	353539	4785351	246	242	39	41	39	40	41
R-0804	Non-Participating	356177	4788034	239	235	45	46	44	45	47
R-0805	Non-Participating	359979	4784313	234	230	43	44	43	44	45
R-0807	Participating	364619	4786053	230	226	51	53	51	52	54
R-0808	Non-Participating	347330	4783732	248	244	46	47	45	46	48
R-0809	Non-Participating	348693	4783142	259	255	44	45	43	44	46
R-0810	Non-Participating	348790	4783177	258	254	43	45	43	44	45
R-0811	Non-Participating	348489	4783224	253	249	45	47	45	46	48
R-0813	Non-Participating	351470	4780102	254	250	49	51	48	49	51
R-0815	Non-Participating	353690	4780021	249	245	40	42	40	41	43
R-0817	Non-Participating	359625	4783390	234	230	43	44	42	43	45
R-0818	Non-Participating	355217	4779321	249	245	40	42	40	41	43
R-0819	Participating	361942	4783560	230	226	48	50	48	49	50
R-0829	Non-Participating	346861	4786326	245	241	41	43	41	42	43
R-0830	Non-Participating	346923	4786346	245	241	41	43	41	42	44
R-0833	Non-Participating	352575	4790182	251	247	37	39	37	38	40
R-0834	Participating	350967	4784789	254	250	40	41	39	41	42
R-0835	Participating	354179	4785353	244	240	38	40	38	39	41
R-0844	Non-Participating	355381	4789532	239	235	49	51	48	49	51
R-0845	Non-Participating	360439	4788269	234	230	47	49	47	48	49
R-0846	Participating	365659	4789709	230	226	47	49	46	48	49
R-0847	Participating	361706	4785097	234	230	48	50	47	49	50
R-0849	Non-Participating	366367	4785547	226	222	44	45	43	44	46
R-0852	Non-Participating	350236	4784342	254	250	40	42	40	41	42
R-0854	Non-Participating	353594	4782955	258	254	45	47	45	46	48

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-0855	Non-Participating	349657	4778935	250	246	39	41	39	40	42
R-0856	Non-Participating	350483	4778978	244	240	39	41	39	40	41
R-0860	Non-Participating	358349	4779836	244	240	37	39	37	38	40
R-0861	Non-Participating	361757	4783419	232	228	47	49	46	48	49
R-0862	Non-Participating	365168	4783478	229	225	48	50	48	49	50
R-0864	Non-Participating	367023	4781877	229	225	41	43	41	42	43
R-0877	Non-Participating	349309	4789596	240	236	44	46	43	44	46
R-0880	Non-Participating	352706	4790634	244	240	36	38	36	37	38
R-0883	Participating	351132	4786506	249	245	50	52	49	50	52
R-0884	Non-Participating	351822	4785663	254	250	42	43	41	42	44
R-0899	Non-Participating	348574	4784385	249	245	42	44	41	43	44
R-0900	Non-Participating	347255	4782942	251	247	43	45	43	44	46
R-0902	Non-Participating	348391	4783181	253	249	46	48	46	47	49
R-0903	Non-Participating	352827	4780600	249	245	41	43	41	42	44
R-0906	Non-Participating	358531	4783351	236	232	40	42	40	41	42
R-0907	Non-Participating	357700	4779408	241	237	38	40	38	39	41
R-0909	Non-Participating	364863	4780757	231	227	44	46	44	45	47
R-0911	Non-Participating	366682	4781880	229	225	43	45	42	44	45
R-0923	Non-Participating	352653	4790472	248	244	36	38	36	37	39
R-0938	Non-Participating	362933	4786510	234	230	49	51	48	50	51
R-0939	Participating	364650	4784253	229	225	47	48	46	47	49
R-0941	Non-Participating	348712	4781733	249	245	46	48	45	46	48
R-0942	Non-Participating	351890	4783188	259	255	42	43	41	43	44
R-0943	Non-Participating	352457	4781570	253	249	42	44	42	43	45
R-0946	Non-Participating	354683	4783259	249	245	44	45	43	44	46
R-0947	Participating	364346	4781020	232	228	43	45	42	44	45
R-0963	Non-Participating	348563	4787320	244	240	47	49	46	47	49
R-0964	Non-Participating	353479	4786461	246	242	45	47	44	46	47
R-0979	Non-Participating	357249	4789564	244	240	40	42	40	41	42
R-0980	Non-Participating	354684	4789575	239	235	43	45	42	44	45
R-0981	Participating	360481	4785112	234	230	49	50	48	49	51
R-0982	Non-Participating	362406	4789633	236	232	40	42	40	41	43
R-0985	Participating	348134	4783230	252	248	51	53	50	51	53
R-0986	Non-Participating	348926	4782375	250	246	44	45	43	44	46
R-0987	Non-Participating	351996	4782525	266	262	43	45	42	44	45
R-0988	Non-Participating	350465	4779993	259	255	44	46	44	45	46
R-0992	Participating	355141	4781010	249	245	53	55	52	53	55
R-0993	Non-Participating	356856	4781315	244	240	46	47	45	46	48
R-0996	Non-Participating	361865	4781551	234	230	40	42	40	41	43
R-0997	Non-Participating	366516	4783607	229	225	44	46	44	45	47
R-0998	Non-Participating	364578	4780320	231	227	41	43	40	42	43
R-1008	Non-Participating	348576	4789864	242	238	38	39	37	39	40
R-1011	Non-Participating	350954	4790247	243	239	37	39	37	38	40
R-1015	Participating	350765	4786537	249	245	52	54	51	52	54
R-1016	Non-Participating	351690	4786390	249	245	47	49	46	47	49
R-1026	Non-Participating	358928	4788115	245	241	43	44	43	44	44
R-1027	Participating	363694	4789685	234	230	45	47	45	46	48
R-1028	Non-Participating	367299	4788370	229	225	40	42	39	41	42
R-1030	Non-Participating	348683	4783055	259	255	44	45	43	44	46
R-1031	Participating	348335	4783229	253	249	47	49	47	48	50
R-1033	Participating	357049	4781795	241	237	42	44	42	43	45
R-1034	Non-Participating	358562	4783351	236	232	40	42	40	41	43
R-1047	Non-Participating	350343	4790924	244	240	35	37	35	36	38
R-1048	Participating	349507	4788971	240	236	51	53	50	51	53
R-1053	Non-Participating	352640	4785522	251	247	40	42	40	41	43
R-1064	Non-Participating	354861	4790858	239	235	37	39	37	38	39
R-1065	Non-Participating	364205	4789659	234	230	48	50	47	48	50
R-1066	Non-Participating	365954	4789691	229	225	45	47	44	45	47
R-1069	Non-Participating	353849	4783228	254	250	44	46	44	45	47

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1071	Non-Participating	357938	4783303	238	234	39	41	39	40	41
R-1090	Non-Participating	352505	4785588	251	247	41	42	40	42	43
R-1101	Non-Participating	354603	4788070	244	240	42	44	42	43	44
R-1106	Participating	366213	4786855	229	225	47	49	47	48	50
R-1108	Participating	350253	4782981	255	251	47	49	46	47	49
R-1109	Participating	350347	4780661	249	245	49	51	49	50	52
R-1111	Non-Participating	363678	4783467	229	225	47	49	46	47	49
R-1113	Non-Participating	364040	4780405	233	229	40	41	39	41	42
R-1129	Non-Participating	353254	4790861	241	237	36	37	35	37	38
R-1131	Non-Participating	349342	4786382	249	245	43	45	42	44	45
R-1132	Non-Participating	349547	4785304	249	245	40	42	40	41	43
R-1133	Non-Participating	351851	4787471	244	240	47	49	46	48	49
R-1148	Participating	359918	4784683	234	230	44	45	43	44	45
R-1150	Non-Participating	364504	4790913	234	230	39	41	39	40	42
R-1151	Non-Participating	365175	4789775	231	227	49	51	48	50	51
R-1152	Non-Participating	366272	4787684	229	225	47	49	47	48	50
R-1153	Non-Participating	350498	4783716	254	250	42	44	41	43	44
R-1154	Non-Participating	348691	4782611	254	250	43	45	42	44	45
R-1157	Non-Participating	355307	4783372	244	240	41	43	41	42	44
R-1158	Non-Participating	357226	4781799	239	235	42	43	41	42	44
R-1159	Participating	364843	4781970	229	225	46	48	46	47	49
R-1160	Non-Participating	366480	4781010	226	222	45	47	45	46	47
R-1162	Non-Participating	366172	4780302	228	224	44	45	43	44	46
R-1175	Non-Participating	352433	4786394	249	245	45	47	44	45	47
R-1177	Non-Participating	353455	4785196	248	244	39	40	38	40	41
R-1186	Non-Participating	354971	4789811	239	235	43	45	42	44	45
R-1187	Participating	354452	4785754	244	240	38	40	38	39	41
R-1188	Participating	359207	4786553	239	235	49	50	49	49	50
R-1191	Non-Participating	367281	4788438	229	225	40	42	39	41	42
R-1192	Non-Participating	362996	4785037	230	226	48	50	47	49	50
R-1193	Non-Participating	348461	4783165	254	250	46	47	45	46	48
R-1194	Non-Participating	350467	4783250	259	255	45	47	45	46	48
R-1195	Non-Participating	347357	4782092	254	250	40	42	40	41	43
R-1196	Participating	352423	4782513	260	256	42	43	41	43	44
R-1198	Non-Participating	357004	4781433	241	237	44	46	43	45	46
R-1199	Non-Participating	358398	4783361	235	231	40	41	40	41	42
R-1200	Non-Participating	364854	4782807	229	225	47	49	46	48	49
R-1201	Participating	366923	4783523	229	225	42	44	41	43	44
R-1216	Non-Participating	352743	4790350	249	245	37	39	37	38	39
R-1217	Non-Participating	350013	4786053	259	255	43	45	43	44	46
R-1231	Non-Participating	348408	4783147	254	250	46	48	45	47	48
R-1232	Non-Participating	348766	4783233	258	254	43	45	43	44	46
R-1233	Non-Participating	349574	4783050	259	255	43	45	42	44	45
R-1234	Non-Participating	347870	4779936	249	245	45	47	44	46	47
R-1236	Participating	361894	4781896	234	230	41	43	41	42	44
R-1237	Non-Participating	366490	4781427	227	223	45	47	45	46	47
R-1245	Participating	351869	4787028	245	241	50	52	49	50	52
R-1263	Non-Participating	362882	4790131	234	230	40	42	40	41	42
R-1265	Non-Participating	362965	4785442	230	226	49	51	48	50	51
R-1266	Non-Participating	365162	4786682	229	225	50	52	50	51	52
R-1269	Non-Participating	348789	4782891	257	253	43	45	42	44	45
R-1270	Non-Participating	350955	4783136	258	254	47	49	46	47	49
R-1271	Non-Participating	352366	4779910	251	247	41	43	41	42	44
R-1272	Participating	355057	4783386	246	242	42	44	41	43	44
R-1273	Non-Participating	355288	4781779	249	245	50	52	49	50	52
R-1274	Non-Participating	359992	4782429	234	230	46	48	46	47	49
R-1286	Non-Participating	347126	4787750	249	245	39	41	38	40	41
R-1291	Non-Participating	350929	4784905	254	250	40	42	39	41	42
R-1306	Non-Participating	356252	4789757	239	235	44	46	43	45	46

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1308	Non-Participating	364602	4790490	234	230	42	43	41	42	44
R-1309	Non-Participating	366137	4789303	229	225	45	47	44	46	47
R-1310	Non-Participating	367490	4788158	229	225	39	41	39	40	42
R-1311	Non-Participating	363077	4787263	234	230	49	51	48	49	51
R-1312	Non-Participating	367147	4786849	225	221	41	43	41	42	43
R-1315	Non-Participating	348477	4783188	254	250	45	47	45	46	48
R-1316	Non-Participating	351781	4782616	264	260	44	46	43	45	46
R-1317	Non-Participating	352181	4780895	249	245	44	46	44	45	47
R-1319	Non-Participating	356984	4778590	240	236	36	38	36	37	39
R-1320	Participating	366342	4781895	230	226	45	47	45	46	48
R-1321	Non-Participating	366742	4780587	226	222	42	43	41	42	44
R-1338	Non-Participating	347270	4784921	245	241	43	45	43	44	46
R-1339	Non-Participating	348340	4785165	244	240	45	46	44	45	47
R-1347	Non-Participating	366845	4787594	229	225	43	45	42	44	45
R-1348	Non-Participating	367243	4788355	229	225	40	42	40	41	42
R-1349	Non-Participating	362993	4787305	234	230	49	51	49	50	51
R-1350	Non-Participating	362186	4785023	234	230	49	51	49	50	52
R-1353	Non-Participating	347464	4784377	246	242	43	44	42	43	45
R-1355	Non-Participating	352069	4779973	259	255	43	45	43	44	46
R-1356	Non-Participating	353561	4779820	249	245	39	41	39	40	42
R-1358	Participating	355076	4783267	248	244	42	44	42	43	45
R-1359	Non-Participating	355243	4782936	249	245	43	45	43	44	46
R-1361	Non-Participating	366437	4783601	229	225	45	47	44	46	47
R-1366	Non-Participating	347117	4786271	244	240	43	45	42	44	45
R-1368	Non-Participating	352585	4790582	247	243	36	38	36	37	38
R-1372	Non-Participating	352463	4789582	249	245	39	41	39	40	42
R-1373	Non-Participating	353874	4789574	247	243	45	47	44	45	47
R-1374	Non-Participating	350320	4785425	259	255	41	43	41	42	43
R-1384	Non-Participating	354379	4786395	244	240	39	41	39	40	42
R-1387	Participating	362616	4788355	234	230	45	47	44	46	47
R-1389	Non-Participating	350219	4779603	252	248	42	44	42	43	45
R-1390	Non-Participating	354911	4780024	249	245	43	45	43	44	46
R-1392	Participating	366356	4781165	227	223	47	49	46	47	49
R-1407	Non-Participating	352651	4790521	247	243	36	38	36	37	39
R-1410	Non-Participating	353445	4785363	246	242	39	41	39	40	42
R-1411	Non-Participating	353429	4785799	246	242	41	42	40	41	43
R-1415	Participating	354366	4786056	244	240	39	41	39	40	41
R-1418	Non-Participating	348708	4782944	259	255	43	45	43	44	46
R-1420	Non-Participating	353747	4781553	254	250	46	48	45	46	48
R-1421	Participating	351960	4780075	259	255	45	47	44	45	47
R-1422	Non-Participating	353691	4779994	249	245	40	42	40	41	43
R-1428	Non-Participating	358417	4780485	239	235	38	40	38	40	41
R-1430	Non-Participating	365368	4783561	231	227	50	52	49	50	52
R-1431	Non-Participating	367393	4782042	227	223	39	41	39	40	42
R-1432	Non-Participating	364657	4780325	231	227	41	43	41	42	44
R-1433	Non-Participating	366478	4780094	227	223	41	42	40	41	43
R-1448	Non-Participating	352569	4790340	249	245	37	39	36	38	39
R-1450	Non-Participating	354397	4788077	244	240	42	44	42	43	45
R-1451	Non-Participating	349375	4786854	244	240	43	45	43	44	46
R-1461	Non-Participating	360525	4788264	234	230	48	49	47	48	49
R-1464	Non-Participating	367061	4789847	229	225	38	40	38	39	41
R-1466	Non-Participating	363011	4786196	232	228	49	51	49	50	51
R-1467	Non-Participating	351914	4782515	269	265	43	45	43	44	46
R-1469	Non-Participating	351293	4779962	249	245	46	48	45	47	48
R-1470	Participating	361174	4782213	234	230	44	46	44	45	47
R-1471	Non-Participating	358358	4779712	244	240	37	39	37	38	40
R-1472	Non-Participating	362559	4783608	229	225	47	48	46	47	49
R-1473	Participating	364685	4784020	229	225	46	48	46	47	49
R-1474	Non-Participating	365509	4783480	232	228	51	53	50	51	53

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1475	Non-Participating	367313	4783491	229	225	40	42	39	41	42
R-1490	Participating	350360	4786469	249	245	48	50	47	49	50
R-1507	Non-Participating	366507	4784031	230	226	44	46	44	45	47
R-1508	Non-Participating	366360	4784383	231	227	45	47	44	46	47
R-1509	Non-Participating	348620	4783179	257	253	44	46	44	45	46
R-1510	Participating	350413	4782395	252	248	52	54	51	52	54
R-1511	Non-Participating	351383	4783309	259	255	43	45	43	44	45
R-1515	Non-Participating	354376	4783345	251	247	44	45	43	44	46
R-1516	Non-Participating	356977	4781696	242	238	43	45	42	44	45
R-1517	Non-Participating	356745	4781373	244	240	46	48	45	46	48
R-1518	Non-Participating	358114	4779321	244	240	37	38	36	38	39
R-1519	Non-Participating	363073	4784068	229	225	46	48	46	47	48
R-1554	Non-Participating	354239	4783929	249	245	40	42	40	41	43
R-1557	Non-Participating	360153	4783487	234	230	43	45	43	44	46
R-1558	Non-Participating	355931	4780038	244	240	47	48	46	47	49
R-1561	Non-Participating	366577	4781734	229	225	44	46	43	45	46
R-1562	Non-Participating	366426	4781776	229	225	45	47	44	46	47
R-1576	Non-Participating	352579	4790284	249	245	37	39	37	38	39
R-1579	Non-Participating	347256	4786218	244	240	44	46	44	45	47
R-1580	Non-Participating	349930	4786381	252	248	44	46	44	45	47
R-1581	Non-Participating	348659	4784874	247	243	42	44	41	43	44
R-1582	Non-Participating	351676	4786392	249	245	47	49	46	47	49
R-1590	Non-Participating	357931	4788237	239	235	40	41	40	41	42
R-1591	Non-Participating	366660	4789971	229	225	40	41	39	41	42
R-1593	Non-Participating	366946	4786760	224	220	42	44	42	43	44
R-1599	Participating	347347	4783242	250	246	46	48	46	47	48
R-1600	Non-Participating	348476	4781551	249	245	46	47	45	46	48
R-1601	Non-Participating	356464	4779954	241	237	47	49	46	47	49
R-1602	Non-Participating	357851	4779397	242	238	38	39	37	39	40
R-1630	Non-Participating	361543	4786047	234	230	49	50	48	49	50
R-1633	Non-Participating	351973	4783203	259	255	41	43	41	42	44
R-1634	Participating	350720	4781672	254	250	52	54	51	52	54
R-1635	Non-Participating	348862	4779250	251	247	41	43	41	42	43
R-1636	Non-Participating	352485	4779896	248	244	41	43	40	42	43
R-1638	Non-Participating	361957	4781478	234	230	40	42	40	41	42
R-1646	Non-Participating	347039	4786373	244	240	42	44	42	43	44
R-1647	Non-Participating	352437	4790383	249	245	36	38	36	37	39
R-1648	Non-Participating	352545	4790388	249	245	36	38	36	38	39
R-1649	Non-Participating	352590	4790395	249	245	37	38	36	38	39
R-1651	Non-Participating	350908	4789458	244	240	41	43	40	41	43
R-1652	Non-Participating	349363	4787074	244	240	44	45	43	44	46
R-1653	Non-Participating	350357	4785199	254	250	40	42	40	41	43
R-1654	Non-Participating	353386	4786433	246	242	45	47	45	46	48
R-1672	Non-Participating	357707	4789534	241	237	39	40	38	39	41
R-1674	Participating	361459	4784376	234	230	47	49	47	48	49
R-1678	Non-Participating	347186	4783008	250	246	43	45	43	44	45
R-1680	Non-Participating	347290	4782087	254	250	40	42	40	41	43
R-1681	Non-Participating	352856	4781628	249	245	42	44	42	43	44
R-1684	Non-Participating	358281	4783362	236	232	40	41	39	40	42
R-1685	Non-Participating	358767	4783525	237	233	40	42	40	41	43
R-1686	Non-Participating	358401	4781273	239	235	40	42	40	41	42
R-1703	Participating	353438	4788661	247	243	50	53	50	51	53
R-1704	Non-Participating	352873	4785415	250	246	40	42	39	41	42
R-1718	Non-Participating	359746	4788133	239	235	46	47	46	46	47
R-1719	Non-Participating	364498	4790289	234	230	43	45	42	44	45
R-1720	Non-Participating	367397	4786589	224	220	40	42	39	41	42
R-1721	Non-Participating	346770	4781622	254	250	38	40	38	39	41
R-1722	Non-Participating	348453	4783080	254	250	45	47	45	46	47
R-1723	Non-Participating	348371	4783172	253	249	47	49	46	47	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1724	Participating	348387	4783223	253	249	47	49	46	47	49
R-1725	Non-Participating	352701	4781726	249	245	42	44	42	43	44
R-1727	Non-Participating	354408	4783525	249	245	42	44	42	43	45
R-1730	Non-Participating	364832	4782282	229	225	47	48	46	47	49
R-1742	Non-Participating	352454	4789822	251	247	38	40	38	39	41
R-1744	Non-Participating	350481	4785391	257	253	41	43	41	42	43
R-1745	Non-Participating	350346	4784875	253	249	40	42	39	41	42
R-1746	Non-Participating	353480	4786425	245	241	45	47	44	45	47
R-1747	Non-Participating	350821	4785067	254	250	40	42	40	41	43
R-1748	Non-Participating	354310	4785630	244	240	38	40	38	39	41
R-1761	Non-Participating	354889	4786492	242	238	38	40	38	39	41
R-1762	Non-Participating	366556	4785223	229	225	43	44	42	43	45
R-1764	Non-Participating	348804	4783801	249	245	42	44	42	43	45
R-1765	Non-Participating	348601	4783226	255	251	44	46	44	45	47
R-1766	Non-Participating	360049	4781119	234	230	40	42	40	41	42
R-1783	Non-Participating	351806	4789065	244	240	40	41	39	41	42
R-1784	Non-Participating	353767	4789495	248	244	46	48	45	46	48
R-1798	Non-Participating	348473	4783286	253	249	46	48	45	46	48
R-1800	Non-Participating	355867	4780035	244	240	46	48	46	47	49
R-1803	Non-Participating	366336	4781611	229	225	46	48	46	47	49
R-1818	Non-Participating	353423	4789739	259	255	43	44	42	43	45
R-1819	Participating	353262	4788590	249	245	47	49	46	48	49
R-1820	Non-Participating	347287	4785145	249	245	45	47	44	46	47
R-1831	Non-Participating	355040	4787392	244	240	40	42	40	41	42
R-1834	Non-Participating	363214	4781818	233	229	45	47	44	45	47
R-1839	Non-Participating	347201	4785937	244	240	45	47	45	46	48
R-1840	Non-Participating	352635	4790545	247	243	36	38	36	37	39
R-1842	Participating	351400	4789488	249	245	39	41	39	40	41
R-1844	Non-Participating	351930	4785674	258	254	42	43	41	42	44
R-1854	Non-Participating	355852	4789507	239	235	49	51	48	50	51
R-1856	Participating	362725	4785047	232	228	49	50	48	49	51
R-1857	Non-Participating	347433	4783064	251	247	46	48	45	47	48
R-1858	Non-Participating	350484	4783184	259	255	46	48	46	47	48
R-1859	Non-Participating	353470	4783656	257	253	41	42	40	42	43
R-1860	Non-Participating	353320	4783189	259	255	42	44	42	43	45
R-1861	Non-Participating	351988	4782197	259	255	43	45	43	44	46
R-1862	Non-Participating	348949	4779319	250	246	41	43	41	42	44
R-1864	Non-Participating	358307	4781605	239	235	41	42	40	41	43
R-1866	Non-Participating	363008	4783446	229	225	46	48	45	46	48
R-1867	Participating	364766	4784047	229	225	46	48	46	47	49
R-1876	Non-Participating	349583	4789478	240	236	48	50	47	48	50
R-1878	Non-Participating	352548	4790359	249	245	37	38	36	38	39
R-1879	Non-Participating	350907	4788371	244	240	44	45	43	44	46
R-1880	Non-Participating	350440	4784870	254	250	40	42	39	41	42
R-1881	Non-Participating	354261	4786558	244	240	40	42	40	41	43
R-1891	Non-Participating	362878	4789040	234	230	43	45	43	44	46
R-1892	Participating	364533	4788754	232	228	50	52	49	50	52
R-1893	Non-Participating	346539	4783106	249	245	39	41	38	40	41
R-1897	Participating	357821	4781881	239	235	40	42	40	41	43
R-1898	Non-Participating	360652	4781946	234	230	43	44	42	43	45
R-1913	Non-Participating	347229	4787832	249	245	39	41	39	40	41
R-1919	Non-Participating	352126	4785781	251	247	42	44	41	43	44
R-1935	Non-Participating	354558	4786487	244	240	39	41	39	40	41
R-1940	Participating	364632	4785716	230	226	52	54	51	53	54
R-1943	Non-Participating	352081	4779903	259	255	43	45	42	43	45
R-1944	Non-Participating	359194	4783432	235	231	42	43	41	42	44
R-1945	Non-Participating	358340	4779916	243	239	38	39	37	39	40
R-1946	Non-Participating	366486	4783734	229	225	45	46	44	45	47
R-1964	Non-Participating	352564	4790365	249	245	37	38	36	38	39

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-1966	Non-Participating	347241	4786755	245	241	43	45	42	43	45
R-1967	Non-Participating	347451	4785127	249	245	46	48	46	47	49
R-1968	Non-Participating	351928	4786623	248	244	47	49	46	48	49
R-1979	Non-Participating	359521	4785059	234	230	44	45	44	44	45
R-1980	Non-Participating	367390	4788337	229	225	39	41	39	40	42
R-1981	Non-Participating	366376	4785227	229	225	43	45	43	44	46
R-1983	Non-Participating	351995	4782418	264	260	43	45	43	44	45
R-1984	Non-Participating	353127	4780114	249	245	40	42	40	41	42
R-1985	Non-Participating	353666	4779995	249	245	40	42	40	41	42
R-1988	Non-Participating	358019	4783427	237	233	39	41	39	40	41
R-1992	Non-Participating	367236	4783419	229	225	40	42	40	41	43
R-1993	Non-Participating	367350	4782039	228	224	39	41	39	40	42
R-1999	Non-Participating	348600	4789256	243	239	40	41	39	40	42
R-2000	Non-Participating	350247	4789174	244	240	48	50	48	49	50
R-2016	Participating	356396	4788635	239	235	52	54	51	52	54
R-2017	Non-Participating	360874	4788272	234	230	49	50	48	49	51
R-2021	Non-Participating	348762	4782964	257	253	43	45	43	44	45
R-2022	Non-Participating	351870	4781838	256	252	44	46	44	45	47
R-2023	Non-Participating	353283	4781595	251	247	43	45	43	44	46
R-2026	Non-Participating	366425	4781862	229	225	45	47	44	45	47
R-2033	Non-Participating	352636	4790576	246	242	36	38	36	37	38
R-2053	Non-Participating	363119	4785026	230	226	48	50	47	49	50
R-2054	Non-Participating	347340	4783358	249	245	47	49	46	47	49
R-2055	Non-Participating	350470	4783617	254	250	42	44	42	43	45
R-2056	Non-Participating	350300	4782177	251	247	49	51	49	50	51
R-2057	Non-Participating	352738	4781487	249	245	42	44	41	43	44
R-2058	Non-Participating	353541	4781559	253	249	45	46	44	45	47
R-2059	Non-Participating	350633	4779921	249	245	44	46	43	45	46
R-2061	Non-Participating	357303	4781801	239	235	41	43	41	42	44
R-2073	Participating	348734	4785206	245	241	42	44	42	43	45
R-2085	Non-Participating	356310	4789830	239	235	43	45	43	44	45
R-2089	Non-Participating	363996	4789657	234	230	47	49	47	48	49
R-2090	Non-Participating	366310	4787658	229	225	47	49	46	48	49
R-2092	Non-Participating	366856	4784503	234	230	42	43	41	43	44
R-2093	Non-Participating	348385	4782866	255	251	44	46	44	45	47
R-2094	Non-Participating	350179	4783166	258	254	45	47	44	46	47
R-2095	Non-Participating	350437	4783446	254	250	44	46	43	44	46
R-2096	Non-Participating	348720	4781077	249	245	50	52	49	50	52
R-2097	Non-Participating	351949	4783897	262	258	40	41	39	41	42
R-2098	Participating	348350	4780200	249	245	51	53	50	51	53
R-2100	Non-Participating	352068	4779825	259	255	42	44	42	43	45
R-2102	Non-Participating	355112	4782928	249	245	44	46	44	45	46
R-2103	Participating	354829	4780986	249	245	51	53	50	51	53
R-2104	Non-Participating	356837	4781670	244	240	44	45	43	44	46
R-2105	Non-Participating	357366	4780182	239	235	43	45	43	44	46
R-2106	Non-Participating	357834	4780084	239	235	40	42	39	41	42
R-2116	Non-Participating	349346	4788650	242	238	46	48	45	46	48
R-2119	Non-Participating	352495	4790345	249	245	37	38	36	38	39
R-2121	Non-Participating	353261	4790121	253	249	39	41	39	40	42
R-2122	Non-Participating	349528	4785585	251	247	41	43	41	42	43
R-2123	Non-Participating	353389	4785180	248	244	39	41	38	40	41
R-2133	Non-Participating	356381	4788189	239	235	46	48	45	46	48
R-2134	Participating	363136	4787652	234	230	50	52	49	50	52
R-2135	Participating	365355	4786713	229	225	50	52	49	50	52
R-2136	Non-Participating	349960	4783262	264	260	43	45	43	44	46
R-2137	Non-Participating	351867	4782892	259	255	43	44	42	43	45
R-2138	Participating	359639	4783447	234	230	42	44	42	43	45
R-2159	Participating	350970	4790156	243	239	38	40	37	39	40
R-2161	Non-Participating	351878	4786326	249	245	45	47	45	46	48

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2162	Non-Participating	353109	4785384	249	245	39	41	39	40	42
R-2173	Non-Participating	354915	4786915	243	239	39	41	39	40	41
R-2175	Non-Participating	364519	4788388	232	228	48	50	48	49	50
R-2176	Non-Participating	363019	4784859	230	226	48	49	47	48	50
R-2177	Non-Participating	365368	4786771	229	225	49	51	49	50	52
R-2178	Non-Participating	367647	4786975	229	225	39	41	39	40	41
R-2179	Non-Participating	346444	4782336	254	250	37	39	37	38	40
R-2180	Non-Participating	347687	4783034	252	248	48	50	48	49	51
R-2181	Non-Participating	348839	4782901	254	250	43	45	42	44	45
R-2182	Non-Participating	353641	4780210	249	245	41	42	40	42	43
R-2184	Non-Participating	355107	4783199	248	244	43	44	42	43	45
R-2185	Participating	357815	4781688	239	235	40	42	40	41	43
R-2186	Non-Participating	360731	4782310	234	230	45	47	44	45	47
R-2187	Non-Participating	356621	4778546	241	237	37	38	36	38	39
R-2188	Participating	364945	4781985	229	225	46	48	46	47	49
R-2189	Non-Participating	367475	4783649	228	224	39	41	39	40	42
R-2204	Non-Participating	352592	4789714	254	250	39	41	39	40	42
R-2205	Non-Participating	352548	4790338	249	245	37	38	36	38	39
R-2206	Non-Participating	352478	4790483	249	245	36	38	36	37	39
R-2208	Non-Participating	347310	4784619	244	240	42	44	42	43	44
R-2209	Non-Participating	352488	4786539	248	244	46	48	45	47	48
R-2210	Non-Participating	352594	4785693	249	245	41	43	41	42	43
R-2219	Non-Participating	363107	4788758	234	230	45	47	45	46	47
R-2221	Non-Participating	348803	4783307	254	250	43	45	43	44	45
R-2222	Participating	350570	4783258	258	254	46	48	45	46	48
R-2223	Non-Participating	352057	4783203	259	255	41	43	41	42	44
R-2224	Non-Participating	353593	4783360	260	256	42	44	42	43	45
R-2226	Non-Participating	356937	4778921	240	236	38	40	38	39	40
R-2227	Non-Participating	361574	4783247	231	227	48	50	47	49	50
R-2240	Non-Participating	350076	4788118	244	240	45	47	44	45	47
R-2243	Non-Participating	352413	4786490	249	245	45	47	45	46	48
R-2244	Non-Participating	351051	4784900	254	250	40	42	39	41	42
R-2245	Non-Participating	354145	4785642	244	240	38	40	38	40	41
R-2246	Participating	353510	4785759	245	241	40	42	40	41	43
R-2247	Non-Participating	353524	4786051	245	241	42	43	41	42	44
R-2248	Non-Participating	353437	4785014	249	245	38	40	38	40	41
R-2257	Non-Participating	355016	4788165	240	236	43	45	42	44	45
R-2260	Non-Participating	360876	4784992	234	230	49	51	48	49	51
R-2261	Non-Participating	366146	4789455	229	225	44	46	44	45	47
R-2263	Participating	362966	4787639	234	230	49	51	48	49	51
R-2264	Non-Participating	366665	4784967	229	225	42	44	42	43	45
R-2265	Non-Participating	366381	4784523	231	227	44	46	44	45	47
R-2266	Non-Participating	348460	4783042	254	250	45	47	44	46	47
R-2267	Non-Participating	348448	4783134	254	250	46	47	45	46	48
R-2268	Non-Participating	350182	4783471	257	253	43	45	42	44	45
R-2269	Non-Participating	350743	4783272	259	255	46	48	45	46	48
R-2270	Non-Participating	354245	4783327	251	247	44	46	43	45	46
R-2271	Non-Participating	350334	4780435	249	245	47	49	47	48	50
R-2273	Non-Participating	358273	4783689	239	235	39	41	39	40	41
R-2274	Non-Participating	363136	4781983	233	229	45	47	45	46	48
R-2276	Non-Participating	366825	4780293	226	222	40	42	39	41	42
R-2290	Non-Participating	353298	4789965	254	250	40	42	40	41	43
R-2291	Non-Participating	352373	4785675	250	246	41	43	41	42	44
R-2302	Non-Participating	359989	4788177	236	232	46	47	46	47	48
R-2303	Non-Participating	361503	4787333	234	230	49	50	48	49	50
R-2304	Non-Participating	361365	4787375	234	230	49	51	49	50	51
R-2305	Non-Participating	367650	4786923	229	225	39	41	39	40	41
R-2309	Non-Participating	349995	4779318	250	246	41	43	40	42	43
R-2330	Non-Participating	353290	4790184	249	245	39	41	39	40	41

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2331	Non-Participating	349453	4787508	244	240	43	45	43	44	46
R-2332	Non-Participating	352558	4787508	245	241	46	47	45	46	48
R-2342	Non-Participating	356529	4788990	239	235	49	51	48	49	51
R-2344	Non-Participating	358107	4788422	239	235	40	41	40	41	42
R-2347	Non-Participating	364645	4784742	229	225	48	50	47	48	50
R-2348	Non-Participating	367622	4786952	229	225	39	41	39	40	41
R-2350	Non-Participating	347380	4782968	251	247	45	47	44	45	47
R-2351	Participating	350906	4783312	259	255	45	47	44	46	47
R-2353	Non-Participating	355124	4782491	249	245	47	49	46	47	49
R-2354	Non-Participating	354471	4783359	250	246	43	45	43	44	46
R-2355	Non-Participating	356621	4781769	244	240	44	46	43	45	46
R-2356	Participating	366336	4781780	229	225	46	48	45	46	48
R-2381	Non-Participating	354765	4789505	239	235	44	46	43	44	46
R-2383	Non-Participating	366139	4789539	229	225	44	46	43	45	46
R-2384	Non-Participating	366705	4789762	229	225	40	42	40	41	42
R-2386	Non-Participating	352225	4779942	255	251	42	44	42	43	44
R-2387	Non-Participating	358446	4783363	236	232	40	42	40	41	42
R-2388	Non-Participating	358995	4783443	236	232	41	43	41	42	43
R-2389	Non-Participating	354649	4780046	249	245	43	44	42	43	45
R-2390	Non-Participating	362385	4782616	234	230	44	46	43	45	46
R-2391	Non-Participating	363591	4783435	229	225	47	49	46	48	49
R-2392	Non-Participating	363767	4781961	231	227	49	51	48	50	51
R-2394	Non-Participating	365839	4780292	229	225	45	47	44	45	47
R-2404	Non-Participating	347073	4788058	249	245	37	39	37	38	40
R-2410	Non-Participating	353116	4789490	259	255	43	45	42	44	45
R-2411	Participating	348103	4786332	244	240	48	50	47	48	50
R-2423	Non-Participating	360775	4789533	238	234	40	41	40	41	42
R-2425	Non-Participating	363072	4788868	234	230	45	46	44	45	47
R-2426	Non-Participating	365320	4788301	230	226	52	54	51	52	54
R-2427	Non-Participating	362585	4785121	232	228	50	52	49	51	52
R-2428	Non-Participating	367018	4786747	224	220	42	43	41	42	44
R-2432	Non-Participating	353422	4783963	253	249	39	41	39	41	42
R-2433	Non-Participating	351955	4779983	259	255	44	46	43	45	46
R-2435	Non-Participating	358304	4782359	236	232	41	43	41	42	44
R-2436	Non-Participating	366744	4783641	229	225	43	45	42	44	45
R-2453	Non-Participating	347272	4785511	246	242	48	50	47	48	50
R-2454	Non-Participating	354233	4786082	244	240	39	41	39	40	42
R-2455	Non-Participating	353126	4785358	249	245	39	41	39	40	42
R-2468	Non-Participating	359583	4788238	239	235	45	46	45	45	46
R-2473	Non-Participating	366308	4789263	229	225	44	46	43	44	46
R-2475	Non-Participating	351990	4783117	259	255	41	43	41	42	44
R-2478	Non-Participating	358278	4783453	236	232	39	41	39	40	42
R-2479	Non-Participating	356982	4779170	240	236	39	41	39	40	42
R-2480	Non-Participating	366937	4781996	229	225	41	43	41	42	44
R-2496	Non-Participating	350853	4790051	242	238	38	40	38	39	41
R-2500	Non-Participating	352585	4789759	254	250	39	41	39	40	41
R-2502	Non-Participating	353388	4790368	246	242	38	40	38	39	41
R-2505	Non-Participating	354319	4785876	244	240	38	40	38	40	41
R-2514	Non-Participating	354618	4786462	244	240	39	41	39	40	41
R-2515	Participating	361323	4786737	234	230	49	50	49	49	51
R-2516	Non-Participating	363111	4789013	234	230	44	46	44	45	47
R-2517	Participating	364443	4788271	232	228	48	50	47	49	50
R-2519	Non-Participating	363619	4785163	229	225	50	52	49	51	52
R-2520	Participating	364582	4784993	229	225	49	51	48	50	51
R-2525	Non-Participating	353573	4783669	254	250	41	43	40	42	43
R-2526	Non-Participating	352915	4783366	259	255	40	42	40	41	43
R-2527	Non-Participating	354157	4783333	251	247	44	46	43	45	46
R-2528	Participating	348656	4780734	249	245	52	54	51	53	54
R-2532	Non-Participating	355590	4781749	249	245	48	50	48	49	51

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2533	Non-Participating	356619	4781679	244	240	44	46	44	45	47
R-2534	Non-Participating	358479	4783363	236	232	40	42	40	41	42
R-2535	Non-Participating	358264	4783398	236	232	39	41	39	40	42
R-2536	Non-Participating	355642	4780052	245	241	46	48	45	46	48
R-2537	Non-Participating	357659	4779281	242	238	38	40	37	39	40
R-2551	Non-Participating	349377	4789835	239	235	42	44	41	43	44
R-2552	Non-Participating	352654	4790617	246	242	36	38	36	37	38
R-2556	Non-Participating	352692	4790632	245	241	36	38	36	37	38
R-2560	Non-Participating	351349	4789531	249	245	39	41	39	40	41
R-2570	Non-Participating	359121	4788377	244	240	43	43	43	43	44
R-2571	Non-Participating	354399	4786542	244	240	40	41	39	41	42
R-2573	Non-Participating	358870	4785033	237	233	42	43	42	42	43
R-2574	Non-Participating	364601	4790408	233	229	42	44	42	43	45
R-2576	Non-Participating	346415	4782409	253	249	37	39	37	38	40
R-2578	Non-Participating	353471	4784280	249	245	39	41	39	40	41
R-2579	Participating	351923	4782215	259	255	44	46	43	44	46
R-2581	Non-Participating	355189	4780192	249	245	45	47	45	46	48
R-2584	Non-Participating	367130	4782113	229	225	40	42	40	41	43
R-2587	Non-Participating	367622	4780424	227	223	36	38	36	37	39
R-2593	Non-Participating	352678	4790622	245	241	36	38	36	37	38
R-2595	Non-Participating	349511	4785778	253	249	41	43	41	42	44
R-2596	Non-Participating	353043	4785539	249	245	40	42	40	41	43
R-2607	Non-Participating	363308	4788404	234	230	48	50	47	48	50
R-2608	Non-Participating	350383	4784246	254	250	40	42	40	41	43
R-2609	Non-Participating	349825	4782929	257	253	44	46	44	45	46
R-2612	Non-Participating	363723	4781127	233	229	42	44	42	43	44
R-2613	Non-Participating	366299	4783578	229	225	46	48	45	47	48
R-2614	Participating	365397	4781885	229	225	50	52	49	50	52
R-2627	Non-Participating	352603	4790436	249	245	36	38	36	37	39
R-2642	Non-Participating	357630	4788213	240	236	40	41	40	41	42
R-2645	Non-Participating	355057	4787209	244	240	39	41	39	40	42
R-2648	Participating	364334	4784947	229	225	50	52	49	50	52
R-2650	Participating	350362	4782773	254	250	50	52	49	51	52
R-2651	Non-Participating	353432	4784220	249	245	39	41	39	40	41
R-2652	Non-Participating	352496	4779964	247	243	41	43	40	42	43
R-2653	Non-Participating	353701	4780012	249	245	40	42	40	41	43
R-2654	Non-Participating	355619	4783272	244	240	41	43	40	42	43
R-2655	Non-Participating	359575	4783379	234	230	42	44	42	43	45
R-2658	Participating	362740	4783596	229	225	46	48	45	47	48
R-2659	Non-Participating	364693	4783462	229	225	46	48	46	47	48
R-2661	Non-Participating	366534	4781476	227	223	45	47	44	45	47
R-2662	Non-Participating	366386	4779805	226	222	39	41	39	40	42
R-2663	Non-Participating	366345	4780103	227	223	41	43	41	42	44
R-2677	Non-Participating	350703	4789467	244	240	42	44	41	43	44
R-2679	Non-Participating	352492	4790335	249	245	37	38	36	38	39
R-2682	Participating	351865	4787354	244	240	48	50	47	48	50
R-2683	Participating	352738	4785079	256	252	39	41	39	40	42
R-2693	Non-Participating	362905	4788693	234	230	45	46	44	45	47
R-2694	Participating	362152	4788379	234	230	44	46	44	45	46
R-2695	Non-Participating	364670	4787037	231	227	48	50	47	49	50
R-2696	Non-Participating	350267	4783163	258	254	45	47	45	46	48
R-2698	Non-Participating	355141	4780759	249	245	50	52	49	51	52
R-2699	Non-Participating	358286	4781281	239	235	40	42	40	41	42
R-2700	Non-Participating	357032	4780055	239	235	45	47	45	46	48
R-2702	Non-Participating	362456	4782630	234	230	44	46	43	45	46
R-2703	Participating	364797	4783250	229	225	47	48	46	47	49
R-2704	Non-Participating	364414	4783458	229	225	46	48	45	47	48
R-2705	Non-Participating	365910	4782688	232	228	49	51	48	49	51
R-2706	Non-Participating	366902	4783616	230	226	42	44	41	43	44

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2707	Non-Participating	366495	4781509	228	224	45	47	44	46	47
R-2721	Non-Participating	346290	4786452	246	242	38	40	37	39	40
R-2722	Non-Participating	347237	4786899	245	241	42	44	42	43	45
R-2724	Non-Participating	348549	4790241	242	238	36	38	36	37	39
R-2731	Participating	347260	4785781	244	240	47	49	46	48	49
R-2750	Non-Participating	366325	4789733	229	225	42	44	42	43	44
R-2753	Non-Participating	350250	4779648	252	248	42	44	42	43	45
R-2755	Non-Participating	352098	4779766	258	254	42	44	41	43	44
R-2756	Non-Participating	359952	4780625	234	230	38	40	38	39	40
R-2757	Non-Participating	358292	4779986	241	237	38	40	38	39	40
R-2758	Non-Participating	362471	4783551	229	225	47	48	46	47	49
R-2759	Non-Participating	363717	4783530	229	225	46	48	46	47	49
R-2760	Non-Participating	364704	4783184	229	225	46	48	46	47	49
R-2761	Non-Participating	366390	4783046	230	226	45	47	45	46	47
R-2774	Non-Participating	353642	4786455	244	240	44	45	43	44	46
R-2783	Participating	356509	4788841	239	235	50	52	49	50	52
R-2786	Participating	366187	4788610	229	225	46	48	45	46	48
R-2789	Non-Participating	366385	4784079	230	226	45	47	45	46	48
R-2791	Non-Participating	348698	4782919	259	255	43	45	43	44	46
R-2792	Non-Participating	348568	4783221	254	250	45	47	44	45	47
R-2794	Non-Participating	351939	4781784	254	250	44	46	43	45	46
R-2795	Participating	354073	4780787	249	245	45	46	44	45	47
R-2796	Non-Participating	354776	4783251	249	245	43	45	43	44	46
R-2797	Non-Participating	354331	4781633	252	248	51	53	51	52	53
R-2798	Non-Participating	356610	4780992	243	239	50	52	50	51	52
R-2799	Participating	361318	4782015	234	230	43	44	42	43	45
R-2800	Non-Participating	355334	4780075	248	244	45	47	44	46	47
R-2801	Non-Participating	366506	4781891	229	225	44	46	44	45	46
R-2802	Non-Participating	366614	4780591	226	222	43	44	42	43	45
R-2804	Non-Participating	365568	4780277	229	225	45	47	44	45	47
R-2805	Non-Participating	366636	4780392	227	223	41	43	41	42	44
R-2806	Non-Participating	366423	4779346	228	224	37	39	36	38	39
R-2817	Non-Participating	353967	4790714	239	235	37	39	37	38	39
R-2818	Non-Participating	352825	4785394	251	247	40	42	39	41	42
R-2833	Non-Participating	354080	4783373	250	246	43	45	43	44	46
R-2835	Non-Participating	352095	4779714	256	252	42	43	41	42	44
R-2864	Non-Participating	364590	4790349	233	229	43	44	42	43	45
R-2865	Non-Participating	366472	4785221	229	225	43	45	43	44	45
R-2866	Non-Participating	366522	4784688	231	227	43	45	43	44	46
R-2869	Non-Participating	346894	4781634	254	250	39	41	38	40	41
R-2871	Non-Participating	346564	4780027	249	245	37	39	37	38	39
R-2872	Non-Participating	351154	4783289	259	255	44	46	44	45	47
R-2874	Non-Participating	353740	4780004	249	245	40	42	40	41	43
R-2876	Non-Participating	354357	4783756	248	244	41	43	41	42	43
R-2878	Non-Participating	358327	4783849	239	235	39	41	39	40	41
R-2880	Non-Participating	364846	4780934	231	227	45	47	44	46	47
R-2882	Non-Participating	367212	4782025	229	225	40	42	40	41	42
R-2896	Non-Participating	350702	4786366	249	245	49	51	48	49	51
R-2897	Non-Participating	347575	4785184	248	244	48	50	47	49	50
R-2906	Non-Participating	359605	4788172	239	235	45	46	45	46	46
R-2908	Non-Participating	363203	4784261	229	225	47	49	46	48	49
R-2909	Non-Participating	366140	4785179	224	220	45	46	44	45	47
R-2911	Non-Participating	346973	4781121	251	247	40	42	39	41	42
R-2912	Non-Participating	353906	4783238	254	250	44	46	44	45	47
R-2913	Non-Participating	353653	4780756	249	245	43	44	42	43	45
R-2916	Non-Participating	355304	4779087	249	245	39	41	39	40	42
R-2917	Non-Participating	358127	4779401	243	239	37	39	37	38	39
R-2919	Non-Participating	366525	4780301	227	223	42	43	41	42	44
R-2932	Non-Participating	347151	4787073	246	242	41	43	41	42	44

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-2936	Non-Participating	353443	4790094	254	250	40	42	39	41	42
R-2937	Non-Participating	352473	4788224	248	244	42	44	42	43	45
R-2938	Non-Participating	351994	4785625	254	250	41	43	41	42	44
R-2940	Non-Participating	353027	4785480	249	245	40	42	40	41	42
R-2954	Non-Participating	366662	4785232	229	225	42	44	42	43	45
R-2955	Non-Participating	348297	4783224	253	249	48	50	47	48	50
R-2957	Non-Participating	352156	4778901	244	240	37	39	37	39	40
R-2958	Non-Participating	356040	4783365	243	239	40	41	39	41	42
R-2962	Non-Participating	365741	4782443	233	229	48	49	47	48	50
R-2964	Non-Participating	366976	4780858	225	221	41	43	40	42	43
R-2974	Participating	351890	4786786	247	243	49	51	48	49	51
R-2975	Non-Participating	353246	4785317	249	245	39	41	39	40	42
R-2983	Non-Participating	359907	4785762	234	230	49	49	49	49	50
R-2985	Participating	365071	4786700	229	225	50	52	49	51	52
R-2989	Non-Participating	348410	4783224	253	249	46	48	46	47	49
R-2990	Non-Participating	350492	4779208	244	240	40	42	40	41	42
R-2991	Non-Participating	351080	4779976	248	244	46	48	45	46	48
R-2994	Non-Participating	356079	4779767	244	240	44	46	44	45	47
R-2996	Participating	361977	4782545	234	230	44	46	43	45	46
R-2997	Non-Participating	366471	4780538	227	223	43	45	43	44	46
R-2998	Non-Participating	367098	4781857	228	224	41	42	40	41	43
R-3011	Non-Participating	350949	4788501	244	240	43	45	42	44	45
R-3012	Non-Participating	350637	4784888	254	250	40	42	39	41	42
R-3021	Non-Participating	355969	4791082	239	235	36	38	36	37	38
R-3024	Non-Participating	364515	4789604	233	229	48	50	47	49	50
R-3025	Non-Participating	366603	4785229	229	225	42	44	42	43	45
R-3026	Non-Participating	347149	4783763	247	243	43	45	43	44	46
R-3027	Non-Participating	346937	4779852	249	245	39	40	38	39	41
R-3028	Non-Participating	348827	4781636	249	245	47	49	46	48	49
R-3029	Non-Participating	352979	4780820	249	245	41	43	41	42	44
R-3032	Participating	366003	4783513	230	226	49	51	48	49	51
R-3043	Non-Participating	349457	4787400	244	240	44	45	43	44	46
R-3044	Non-Participating	353386	4787461	245	241	46	48	45	47	48
R-3045	Non-Participating	354270	4786406	244	240	40	42	39	41	42
R-3063	Non-Participating	367612	4786727	229	225	39	41	39	40	41
R-3064	Non-Participating	367509	4786968	229	225	39	41	39	40	42
R-3065	Non-Participating	348634	4784374	249	245	42	43	41	42	44
R-3066	Non-Participating	348573	4783184	255	251	45	46	44	45	47
R-3067	Non-Participating	353441	4783344	263	259	42	44	42	43	44
R-3068	Participating	351502	4782154	259	255	47	49	46	48	49
R-3069	Non-Participating	348753	4779213	251	247	41	43	40	42	43
R-3070	Non-Participating	356171	4781764	246	242	46	48	45	46	48
R-3073	Non-Participating	364238	4783564	229	225	46	48	45	47	48
R-3075	Participating	364423	4781034	232	228	43	45	43	44	45
R-3076	Non-Participating	365108	4782145	229	225	47	48	46	47	49
R-3077	Non-Participating	366852	4781879	229	225	42	44	41	43	44
R-3078	Non-Participating	366934	4782067	229	225	41	43	41	42	44
R-3089	Non-Participating	347057	4784755	244	240	41	43	41	42	44
R-3092	Non-Participating	352489	4789569	249	245	39	41	39	40	42
R-3093	Non-Participating	350318	4785307	254	250	41	42	40	42	43
R-3107	Non-Participating	350398	4783286	259	255	45	47	44	46	47
R-3108	Non-Participating	347339	4782595	252	248	42	44	41	43	44
R-3109	Participating	351266	4780062	253	249	48	50	47	48	50
R-3112	Non-Participating	357996	4779408	242	238	37	39	37	38	40
R-3113	Non-Participating	362353	4783536	229	225	47	49	46	48	49
R-3114	Non-Participating	367204	4783670	230	226	40	42	40	41	43
R-3129	Non-Participating	347139	4787697	249	245	39	41	39	40	42
R-3131	Non-Participating	348172	4788053	245	241	41	43	40	42	43
R-3134	Non-Participating	352481	4790449	249	245	36	38	36	37	39

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3136	Participating	348919	4787009	244	240	45	47	44	46	47
R-3153	Non-Participating	363630	4788655	234	230	48	50	47	48	50
R-3154	Non-Participating	348456	4783108	254	250	45	47	45	46	48
R-3155	Non-Participating	351885	4779964	258	254	44	46	44	45	47
R-3157	Non-Participating	359528	4783376	234	230	42	44	42	43	45
R-3159	Non-Participating	358223	4779417	242	238	37	38	36	38	39
R-3161	Non-Participating	363114	4782176	232	228	46	48	46	47	49
R-3170	Non-Participating	348623	4788524	244	240	40	42	40	41	43
R-3175	Non-Participating	352545	4790496	249	245	36	38	36	37	39
R-3177	Non-Participating	351283	4786343	249	245	48	49	47	48	50
R-3178	Participating	352533	4786608	247	243	47	49	46	47	49
R-3189	Non-Participating	367172	4786704	224	220	41	43	40	42	43
R-3190	Non-Participating	366988	4786756	224	220	42	44	41	43	44
R-3192	Non-Participating	348757	4783320	254	250	43	45	43	44	46
R-3193	Participating	350452	4780766	249	245	49	51	48	50	51
R-3197	Non-Participating	364343	4780392	232	228	40	42	40	41	43
R-3219	Non-Participating	346988	4784753	244	240	41	43	41	42	43
R-3220	Non-Participating	349999	4790693	239	235	37	38	36	38	39
R-3221	Non-Participating	347439	4788286	247	243	38	40	38	39	40
R-3224	Non-Participating	354204	4789733	239	235	42	44	42	43	45
R-3225	Non-Participating	349470	4786528	248	244	43	45	43	44	45
R-3226	Non-Participating	348092	4785241	246	242	48	50	47	48	50
R-3227	Non-Participating	354234	4786065	244	240	39	41	39	40	42
R-3228	Non-Participating	353554	4785084	248	244	38	40	38	40	41
R-3245	Non-Participating	363015	4784727	230	226	47	49	47	48	50
R-3247	Non-Participating	364638	4784819	229	225	48	50	47	49	50
R-3249	Non-Participating	348471	4783029	254	250	45	47	44	45	47
R-3252	Non-Participating	358346	4780522	239	235	39	41	38	40	41
R-3253	Non-Participating	364718	4781961	229	225	46	48	46	47	49
R-3254	Non-Participating	366422	4781896	229	225	45	47	44	45	47
R-3256	Non-Participating	367153	4780400	225	221	38	40	38	39	41
R-3271	Non-Participating	350221	4788727	244	240	47	49	46	48	49
R-3275	Non-Participating	352545	4790440	249	245	36	38	36	37	39
R-3276	Non-Participating	352858	4785575	249	245	40	42	40	41	43
R-3292	Non-Participating	363009	4785131	230	226	48	50	47	49	50
R-3293	Non-Participating	348759	4783093	258	254	43	45	43	44	46
R-3295	Non-Participating	348550	4783224	254	250	45	47	44	46	47
R-3296	Non-Participating	349204	4783248	259	255	42	44	42	43	44
R-3297	Non-Participating	353568	4783744	252	248	40	42	40	41	43
R-3298	Non-Participating	349582	4779216	254	250	41	42	40	41	43
R-3299	Non-Participating	351615	4779766	249	245	44	46	43	44	46
R-3303	Non-Participating	359911	4782071	234	230	47	49	46	48	49
R-3304	Non-Participating	362015	4782710	233	229	44	46	44	45	47
R-3305	Non-Participating	364440	4781157	232	228	44	45	43	44	46
R-3307	Non-Participating	366648	4781882	229	225	43	45	43	44	46
R-3308	Participating	366348	4780774	227	223	46	48	45	46	48
R-3320	Non-Participating	349355	4788331	244	240	44	45	43	44	46
R-3323	Non-Participating	352397	4786421	249	245	45	47	44	46	47
R-3340	Participating	358801	4786490	246	242	46	46	46	46	46
R-3345	Non-Participating	348531	4783228	254	250	45	47	44	46	47
R-3346	Non-Participating	348747	4783264	257	253	43	45	43	44	46
R-3347	Participating	353669	4780902	249	245	43	45	43	44	45
R-3348	Participating	353636	4781297	252	248	44	46	44	45	47
R-3350	Non-Participating	360873	4782425	233	229	46	48	46	47	49
R-3351	Participating	364972	4783092	229	225	47	49	47	48	50
R-3355	Non-Participating	366631	4780291	227	223	41	43	40	42	43
R-3368	Non-Participating	349559	4788604	240	236	47	49	46	48	49
R-3370	Non-Participating	353527	4785239	246	242	39	40	38	40	41
R-3382	Non-Participating	363019	4789943	234	230	41	43	41	42	43

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3383	Non-Participating	365830	4789694	229	225	46	48	45	46	48
R-3384	Non-Participating	366353	4784626	230	226	44	46	44	45	47
R-3385	Non-Participating	346608	4781676	254	250	38	39	37	39	40
R-3386	Non-Participating	348726	4781190	249	245	49	51	48	49	51
R-3387	Non-Participating	351442	4783188	259	255	44	45	43	44	46
R-3388	Non-Participating	353510	4783398	264	260	42	44	42	43	44
R-3392	Non-Participating	358435	4783413	237	233	40	41	40	41	42
R-3394	Non-Participating	357867	4780045	239	235	40	41	39	41	42
R-3396	Non-Participating	365602	4780271	229	225	45	47	44	45	47
R-3397	Non-Participating	366466	4780281	227	223	42	44	41	43	44
R-3398	Non-Participating	365887	4780390	229	225	46	48	45	46	48
R-3414	Non-Participating	346797	4786442	245	241	40	42	40	41	43
R-3415	Non-Participating	350305	4789164	244	240	47	49	47	48	50
R-3417	Non-Participating	352588	4790532	248	244	36	38	36	37	39
R-3418	Non-Participating	353374	4790132	251	247	39	41	39	40	42
R-3419	Non-Participating	350229	4785414	259	255	41	43	40	42	43
R-3420	Non-Participating	350967	4787536	245	241	50	52	50	51	53
R-3431	Non-Participating	357821	4788253	239	235	40	41	40	41	42
R-3433	Non-Participating	359662	4789340	239	235	40	41	40	41	42
R-3441	Participating	354519	4780851	249	245	48	50	47	48	50
R-3442	Non-Participating	358410	4783411	236	232	40	41	40	41	42
R-3444	Non-Participating	358373	4782000	236	232	41	43	41	42	44
R-3448	Participating	365153	4783555	229	225	48	50	47	49	50
R-3457	Participating	349420	4788018	244	240	43	45	42	44	45
R-3461	Participating	353413	4789386	254	250	46	48	46	47	49
R-3463	Non-Participating	353720	4785266	244	240	38	40	38	40	41
R-3479	Non-Participating	354458	4786397	244	240	39	41	39	40	42
R-3480	Non-Participating	362903	4788776	234	230	44	46	44	45	47
R-3481	Non-Participating	363016	4789375	234	230	43	45	43	44	45
R-3482	Non-Participating	366135	4789223	229	225	45	47	45	46	47
R-3483	Non-Participating	367261	4788130	229	225	40	42	40	41	43
R-3484	Non-Participating	366360	4784359	231	227	45	47	44	46	47
R-3487	Non-Participating	352720	4779967	245	241	40	42	40	41	43
R-3488	Non-Participating	359054	4783484	236	232	41	43	41	42	43
R-3489	Non-Participating	355148	4779684	249	245	42	44	41	43	44
R-3490	Participating	365311	4780351	229	225	44	46	44	45	47
R-3505	Non-Participating	352582	4790493	249	245	36	38	36	37	39
R-3518	Non-Participating	363032	4790033	234	230	41	42	40	42	43
R-3520	Non-Participating	367037	4789768	229	225	39	40	38	40	41
R-3521	Non-Participating	363622	4786744	234	230	49	51	48	49	51
R-3522	Non-Participating	366348	4785930	227	223	44	46	43	45	46
R-3524	Non-Participating	348707	4782899	259	255	43	45	43	44	45
R-3525	Non-Participating	348454	4783183	254	250	46	48	45	46	48
R-3526	Non-Participating	348807	4783184	257	253	43	45	43	44	45
R-3527	Participating	348972	4783146	254	250	42	44	42	43	45
R-3528	Participating	354048	4781717	253	249	49	51	48	49	51
R-3530	Non-Participating	355808	4780033	244	240	46	48	45	47	48
R-3531	Non-Participating	362364	4783338	230	226	46	48	45	46	48
R-3533	Non-Participating	366347	4781397	228	224	47	49	46	47	49
R-3545	Non-Participating	351902	4786667	247	243	48	50	47	48	50
R-3546	Non-Participating	351931	4785653	258	254	41	43	41	42	44
R-3564	Non-Participating	348412	4783157	254	250	46	48	45	47	48
R-3565	Non-Participating	348870	4779319	250	246	41	43	41	42	44
R-3566	Non-Participating	353658	4780026	249	245	40	42	40	41	43
R-3569	Non-Participating	358350	4783316	235	231	40	41	40	41	42
R-3572	Non-Participating	364772	4780072	230	226	40	42	40	41	43
R-3576	Non-Participating	350152	4788583	244	240	46	48	46	47	49
R-3578	Participating	353343	4788518	248	244	47	49	46	48	49
R-3593	Non-Participating	365579	4789780	230	226	47	49	46	48	49

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3594	Non-Participating	348692	4783265	256	252	44	46	43	44	46
R-3595	Non-Participating	350183	4783533	256	252	42	44	42	43	45
R-3596	Non-Participating	351712	4781591	257	253	45	47	45	46	47
R-3597	Non-Participating	355150	4781651	249	245	51	53	51	52	53
R-3600	Non-Participating	364856	4783341	229	225	47	49	46	47	49
R-3612	Non-Participating	350573	4789559	243	239	42	44	42	43	45
R-3615	Non-Participating	352545	4790531	248	244	36	38	36	37	39
R-3618	Non-Participating	348584	4785317	244	240	43	45	43	44	46
R-3619	Non-Participating	354305	4786328	244	240	39	41	39	40	42
R-3631	Non-Participating	355030	4789497	239	235	46	47	45	46	48
R-3634	Participating	359785	4785449	234	230	47	47	46	47	48
R-3635	Non-Participating	347328	4784072	247	243	43	45	43	44	46
R-3639	Participating	357124	4781787	241	237	42	44	42	43	44
R-3641	Participating	365442	4781968	229	225	49	51	48	49	51
R-3642	Non-Participating	364129	4780153	232	228	39	41	39	40	41
R-3661	Non-Participating	357299	4790155	239	235	38	39	38	39	40
R-3664	Non-Participating	366677	4786718	224	220	43	45	43	44	46
R-3666	Non-Participating	347339	4783650	249	245	46	48	45	47	48
R-3668	Non-Participating	357320	4781918	239	235	41	43	41	42	43
R-3670	Non-Participating	356548	4781549	244	240	46	48	45	46	48
R-3672	Non-Participating	364473	4783409	229	225	46	48	45	47	48
R-3673	Non-Participating	366541	4781888	229	225	44	46	43	45	46
R-3687	Non-Participating	353440	4788131	245	241	44	46	44	45	47
R-3688	Non-Participating	352294	4786245	249	245	44	46	43	45	46
R-3691	Non-Participating	353451	4785092	249	245	39	40	38	40	41
R-3701	Non-Participating	359804	4788813	238	234	42	43	42	43	44
R-3702	Participating	363210	4790584	234	230	39	41	39	40	41
R-3703	Participating	364636	4788612	232	228	49	51	48	50	51
R-3706	Non-Participating	367297	4786559	224	220	40	42	40	41	43
R-3708	Non-Participating	348610	4782829	258	254	43	45	43	44	46
R-3709	Non-Participating	348444	4783225	253	249	46	48	45	47	48
R-3710	Non-Participating	350383	4783024	256	252	48	50	47	48	50
R-3711	Non-Participating	353960	4783341	252	248	44	45	43	44	46
R-3713	Participating	360836	4783396	234	230	48	50	48	49	51
R-3714	Non-Participating	363251	4783939	229	225	46	48	46	47	48
R-3715	Non-Participating	364728	4782477	229	225	47	49	46	48	49
R-3716	Non-Participating	364837	4782519	229	225	47	49	46	47	49
R-3736	Participating	351147	4789414	247	243	40	42	39	41	42
R-3737	Participating	350722	4786538	249	245	52	54	51	52	54
R-3738	Non-Participating	350344	4785058	251	247	40	42	40	41	43
R-3754	Non-Participating	366631	4789139	229	225	42	44	42	43	44
R-3756	Participating	349202	4783177	258	254	42	44	42	43	45
R-3757	Non-Participating	351697	4783177	259	255	42	44	42	43	45
R-3758	Non-Participating	347327	4779194	250	246	38	40	37	39	40
R-3759	Non-Participating	354817	4783252	249	245	43	45	43	44	45
R-3760	Non-Participating	357176	4781800	240	236	42	44	41	43	44
R-3761	Non-Participating	365113	4782876	234	230	48	50	48	49	51
R-3762	Participating	365324	4781954	229	225	48	50	48	49	51
R-3763	Non-Participating	365719	4780003	229	225	42	44	41	43	44
R-3771	Non-Participating	347127	4788445	248	244	36	38	36	37	39
R-3772	Non-Participating	352494	4790413	249	245	36	38	36	37	39
R-3774	Participating	353437	4788616	247	243	50	52	49	50	52
R-3775	Non-Participating	353837	4788146	244	240	44	46	44	45	47
R-3776	Participating	349462	4787255	244	240	44	46	43	44	46
R-3777	Non-Participating	348750	4784493	249	245	41	43	41	42	44
R-3778	Non-Participating	348912	4784867	248	244	41	43	41	42	43
R-3780	Participating	352735	4785053	256	252	39	41	39	40	42
R-3793	Non-Participating	357298	4789847	240	236	39	40	39	40	41
R-3794	Non-Participating	361352	4786538	234	230	49	50	48	49	50

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-3795	Non-Participating	364508	4789545	233	229	49	51	48	49	51
R-3796	Non-Participating	366207	4791038	229	225	37	39	37	38	40
R-3797	Non-Participating	366359	4784432	231	227	45	47	44	46	47
R-3798	Non-Participating	353232	4783327	259	255	41	43	41	42	44
R-3801	Non-Participating	355294	4779314	249	245	40	42	40	41	43
R-3802	Non-Participating	366435	4783948	229	225	45	47	44	46	47
R-3803	Non-Participating	366346	4779584	227	223	38	40	38	39	40
R-3829	Non-Participating	354749	4786627	243	239	39	41	39	40	41
R-3832	Non-Participating	348414	4782959	254	250	45	47	44	45	47
R-3833	Participating	349682	4783244	259	255	42	44	42	43	45
R-3834	Non-Participating	351648	4783189	259	255	43	44	42	43	45
R-3835	Non-Participating	355109	4783080	249	245	43	45	43	44	46
R-3837	Non-Participating	355807	4781774	249	245	47	49	47	48	49
R-3838	Non-Participating	359887	4782771	234	230	46	47	45	46	48
R-3839	Non-Participating	356000	4780040	244	240	47	49	46	47	49
R-3840	Non-Participating	357351	4780036	239	235	43	45	42	43	45
R-3841	Participating	361543	4783888	234	230	48	50	48	49	51
R-3854	Non-Participating	350341	4790791	244	240	36	38	36	37	38
R-3855	Non-Participating	350248	4787995	244	240	46	48	45	46	48
R-3860	Non-Participating	353299	4789708	256	252	42	44	42	43	45
R-3861	Non-Participating	350164	4787881	244	240	46	48	45	47	48
R-3862	Participating	350680	4786496	249	245	51	53	50	51	53
R-3863	Non-Participating	352271	4786327	249	245	44	46	44	45	47
R-3864	Participating	351889	4786875	246	242	49	51	48	50	51
R-3865	Non-Participating	351967	4785206	254	250	40	42	40	41	42
R-3877	Non-Participating	356432	4788129	239	235	45	47	44	45	47
R-3878	Non-Participating	366121	4789140	229	225	46	47	45	46	48
R-3879	Participating	364798	4785319	229	225	51	53	51	52	53
R-3880	Non-Participating	350267	4783075	257	253	46	48	45	47	48
R-3881	Participating	353524	4782493	254	250	47	49	46	48	49
R-3882	Non-Participating	348858	4779716	249	245	44	46	44	45	47
R-3883	Non-Participating	351877	4779985	258	254	45	47	44	45	47
R-3884	Participating	354750	4780769	249	245	48	50	47	49	50
R-3885	Non-Participating	356864	4781572	244	240	44	46	43	45	46
R-3886	Non-Participating	366462	4781575	229	225	45	47	45	46	47
R-3887	Non-Participating	366000	4780222	229	225	44	45	43	44	46
R-3914	Non-Participating	347232	4783508	249	245	45	47	44	46	47
R-3915	Non-Participating	350882	4783867	254	250	41	43	41	42	44
R-3916	Non-Participating	351565	4783288	259	255	42	44	42	43	45
R-3919	Non-Participating	366478	4780011	226	222	40	42	40	41	42
R-3932	Participating	354477	4788080	244	240	42	44	42	43	45
R-3937	Non-Participating	367008	4789834	229	225	39	40	38	40	41
R-3938	Non-Participating	348633	4783227	257	253	44	46	44	45	46
R-3940	Non-Participating	350493	4778795	244	240	38	40	38	39	41
R-3941	Non-Participating	353538	4779853	249	245	39	41	39	40	42
R-3942	Non-Participating	356721	4781619	244	240	44	46	44	45	47
R-3945	Non-Participating	366345	4779913	226	222	40	42	39	41	42
R-3958	Non-Participating	353443	4787863	244	240	44	46	43	44	46
R-3959	Non-Participating	348774	4784472	249	245	41	43	41	42	44
R-3972	Participating	362966	4787548	234	230	49	51	48	49	51
R-3973	Non-Participating	366238	4785438	229	225	44	46	44	45	47
R-3975	Non-Participating	350103	4784143	254	250	40	42	40	41	43
R-3976	Non-Participating	356894	4779899	239	235	45	47	44	46	47
R-3977	Non-Participating	367242	4783516	229	225	40	42	40	41	43
R-3979	Non-Participating	366496	4780201	227	223	41	43	41	42	43
R-3991	Non-Participating	348580	4789986	242	238	37	39	37	38	40
R-3993	Non-Participating	352349	4790211	249	245	37	39	37	38	39
R-3994	Non-Participating	348743	4784522	249	245	41	43	41	42	44
R-3995	Non-Participating	353523	4785674	245	241	40	42	40	41	42

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4008	Non-Participating	355061	4790069	239	235	42	43	41	42	44
R-4009	Participating	362616	4789124	235	231	42	44	42	43	45
R-4010	Non-Participating	366189	4788191	229	225	46	48	45	47	48
R-4015	Non-Participating	366432	4784207	231	227	45	47	44	46	47
R-4016	Participating	350298	4782652	254	250	50	52	49	50	52
R-4017	Non-Participating	350293	4782880	254	250	48	50	47	49	50
R-4018	Non-Participating	351990	4782929	259	255	42	44	42	43	44
R-4019	Non-Participating	353745	4783220	254	250	44	46	43	45	46
R-4021	Non-Participating	351815	4781588	254	250	45	46	44	45	47
R-4023	Non-Participating	359415	4781771	234	230	48	50	47	48	50
R-4024	Non-Participating	356944	4779013	240	236	38	40	38	39	41
R-4026	Non-Participating	366709	4783611	229	225	43	45	43	44	45
R-4044	Non-Participating	352203	4785753	251	247	42	43	41	42	44
R-4050	Non-Participating	365456	4791241	231	227	37	39	37	38	40
R-4054	Non-Participating	361405	4789604	238	234	40	41	40	41	42
R-4058	Non-Participating	348839	4782822	254	250	43	45	42	44	45
R-4059	Non-Participating	348379	4783013	254	250	45	47	45	46	48
R-4060	Non-Participating	350260	4783823	254	250	41	43	41	42	44
R-4061	Non-Participating	353095	4783476	259	255	41	42	40	41	43
R-4062	Non-Participating	353584	4783575	255	251	41	43	41	42	44
R-4065	Non-Participating	363356	4782231	232	228	49	51	48	49	51
R-4080	Participating	353831	4789492	246	242	46	48	45	46	48
R-4081	Non-Participating	352584	4786381	249	245	45	47	45	46	47
R-4082	Non-Participating	351934	4786502	248	244	46	48	46	47	49
R-4099	Non-Participating	362886	4788041	234	230	47	49	47	48	49
R-4100	Non-Participating	348702	4782875	259	255	43	45	43	44	45
R-4101	Participating	350193	4783979	254	250	41	42	40	42	43
R-4102	Non-Participating	350404	4783168	259	255	46	48	45	47	48
R-4103	Non-Participating	348692	4782353	251	247	43	45	43	44	46
R-4106	Non-Participating	347442	4779928	249	245	42	44	41	43	44
R-4108	Non-Participating	357392	4781693	239	235	41	43	41	42	44
R-4122	Non-Participating	352484	4790426	249	245	36	38	36	37	39
R-4125	Non-Participating	354164	4789666	239	235	43	45	42	44	45
R-4126	Non-Participating	350135	4787687	244	240	47	49	46	48	49
R-4127	Non-Participating	353469	4787176	247	243	48	50	47	48	50
R-4137	Non-Participating	365717	4786785	229	225	49	51	49	50	51
R-4138	Participating	365325	4786700	229	225	50	52	49	50	52
R-4139	Non-Participating	366392	4785936	228	224	44	46	43	45	46
R-4140	Non-Participating	366545	4786332	224	220	43	45	43	44	46
R-4141	Non-Participating	348697	4783183	259	255	44	46	43	44	46
R-4142	Non-Participating	353479	4783316	261	257	42	44	42	43	45
R-4143	Participating	350787	4781575	254	250	50	52	50	51	53
R-4144	Non-Participating	352028	4781157	253	249	44	46	44	45	47
R-4145	Non-Participating	347596	4779918	249	245	43	45	42	44	45
R-4146	Non-Participating	348903	4779531	249	245	43	45	42	44	45
R-4148	Non-Participating	358195	4780093	239	235	38	40	38	39	41
R-4149	Non-Participating	357928	4779265	244	240	37	39	37	38	39
R-4151	Non-Participating	363084	4783577	229	225	46	47	45	46	48
R-4152	Non-Participating	366391	4783657	229	225	45	47	45	46	48
R-4164	Non-Participating	349337	4788265	244	240	43	45	43	44	46
R-4165	Non-Participating	350052	4788400	244	240	45	47	45	46	48
R-4166	Non-Participating	352655	4790349	249	245	37	39	37	38	39
R-4167	Non-Participating	349517	4785152	249	245	40	42	40	41	43
R-4168	Non-Participating	351886	4787125	244	240	49	51	48	50	51
R-4169	Non-Participating	352552	4786539	248	244	46	48	46	47	49
R-4173	Non-Participating	360833	4788203	234	230	50	51	49	50	52
R-4176	Non-Participating	366197	4790833	229	225	38	40	38	39	40
R-4179	Non-Participating	366254	4785223	226	222	44	46	44	45	46
R-4181	Participating	349650	4783250	259	255	42	44	42	43	45

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4182	Non-Participating	352656	4783432	262	258	40	42	40	41	43
R-4183	Non-Participating	351395	4781607	259	255	47	49	47	48	50
R-4184	Non-Participating	354066	4780917	250	246	45	47	45	46	48
R-4187	Non-Participating	354367	4783447	250	246	43	45	42	44	45
R-4189	Non-Participating	356067	4781780	248	244	46	48	45	47	48
R-4190	Non-Participating	358294	4783410	236	232	39	41	39	40	42
R-4191	Non-Participating	358276	4782901	237	233	40	42	40	41	43
R-4192	Non-Participating	358286	4781708	238	234	41	42	40	42	43
R-4193	Non-Participating	357182	4778718	241	237	37	38	36	38	39
R-4214	Non-Participating	353417	4790165	251	247	39	41	39	40	42
R-4222	Participating	359886	4786312	234	230	55	55	55	55	55
R-4223	Non-Participating	364316	4789858	234	230	46	48	45	46	48
R-4224	Non-Participating	361982	4788241	234	230	45	46	45	46	47
R-4227	Non-Participating	366363	4784302	231	227	45	47	45	46	47
R-4229	Non-Participating	352186	4782755	263	259	42	44	41	43	44
R-4232	Non-Participating	355556	4783359	244	240	41	42	40	42	43
R-4235	Non-Participating	366425	4781814	229	225	45	47	44	46	47
R-4237	Non-Participating	366309	4779679	227	223	39	40	38	40	41
R-4252	Non-Participating	349534	4785472	249	245	41	43	40	42	43
R-4253	Non-Participating	352795	4786431	249	245	47	49	46	47	49
R-4254	Non-Participating	351936	4785284	254	250	40	42	40	41	43
R-4255	Non-Participating	351948	4785415	254	250	40	42	40	41	43
R-4270	Non-Participating	364594	4790513	234	230	42	43	41	42	44
R-4271	Non-Participating	348458	4782858	254	250	44	46	43	45	46
R-4272	Participating	348386	4783234	253	249	47	49	46	47	49
R-4273	Non-Participating	351610	4784272	254	250	39	41	39	40	42
R-4274	Non-Participating	351249	4783168	259	255	45	47	44	45	47
R-4275	Non-Participating	351926	4781133	250	246	45	47	45	46	47
R-4276	Non-Participating	350482	4779853	251	247	43	45	43	44	46
R-4277	Non-Participating	353590	4779854	249	245	39	41	39	40	42
R-4279	Non-Participating	358407	4781521	239	235	41	42	40	42	43
R-4280	Non-Participating	362127	4781909	234	230	42	43	41	42	44
R-4290	Non-Participating	353244	4790159	251	247	39	41	39	40	41
R-4291	Non-Participating	353723	4789608	252	248	44	46	44	45	47
R-4310	Non-Participating	366103	4790984	229	225	37	39	37	39	40
R-4326	Non-Participating	347252	4780612	249	245	42	44	42	43	45
R-4328	Non-Participating	348870	4783193	255	251	43	45	42	44	45
R-4330	Non-Participating	353550	4785812	245	241	40	42	40	41	43
R-4331	Participating	352721	4781404	249	245	42	44	41	43	44
R-4332	Participating	353560	4780727	249	245	42	44	42	43	44
R-4333	Non-Participating	352764	4780664	249	245	41	43	41	42	44
R-4334	Non-Participating	354928	4786809	243	239	39	41	39	40	41
R-4336	Non-Participating	356329	4788299	239	235	47	49	47	48	49
R-4339	Non-Participating	363145	4784796	230	226	48	50	47	49	50
R-4340	Non-Participating	362512	4781807	234	230	42	44	41	43	44
R-4341	Participating	363878	4788255	234	230	49	51	49	50	52
R-4342	Non-Participating	364753	4780654	231	227	43	45	43	44	46
R-4345	Non-Participating	364901	4783569	229	225	47	49	46	47	49
R-4346	Non-Participating	365385	4783483	232	228	50	52	49	50	52
R-4348	Non-Participating	367191	4788334	229	225	40	42	40	41	43
R-4351	Non-Participating	367235	4781879	227	223	40	42	39	41	42
R-4352	Non-Participating	366708	4780555	226	222	42	44	41	42	44
R-4500	Non-Participating	366862	4780756	226	222	41	43	41	42	44
R-4501	Non-Participating	367207	4781883	227	223	40	42	40	41	42
R-4502	Non-Participating	366455	4783860	229	225	45	47	44	46	47
R-4503	Non-Participating	365531	4791218	231	227	37	39	37	38	40
R-4504	Participating	364693	4788110	231	227	49	51	48	50	51
R-4505	Participating	364808	4784055	229	225	47	48	46	47	49
R-4507	Participating	360992	4783405	234	230	49	51	49	50	52

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4508	Non-Participating	362868	4784713	231	227	47	49	47	48	49
R-4509	Non-Participating	363548	4786779	234	230	48	50	48	49	51
R-4510	Non-Participating	358375	4783472	237	233	40	41	39	41	42
R-4511	Non-Participating	353390	4783909	254	250	40	41	39	41	42
R-4513	Non-Participating	353413	4784355	249	245	39	40	38	40	41
R-4514	Non-Participating	353574	4784340	249	245	39	41	38	40	41
R-4515	Non-Participating	352640	4783310	259	255	40	42	40	41	43
R-4516	Non-Participating	350899	4784227	254	250	40	42	40	41	42
R-4517	Non-Participating	350401	4784369	254	250	40	42	40	41	42
R-4518	Non-Participating	350222	4784531	254	250	40	41	39	41	42
R-4519	Non-Participating	351757	4783333	259	255	42	43	41	42	44
R-4520	Non-Participating	348765	4783386	254	250	43	45	43	44	46
R-4521	Non-Participating	348310	4785152	244	240	45	47	44	45	47
R-4522	Non-Participating	350100	4786102	255	251	44	46	43	45	46
R-4523	Non-Participating	348698	4786281	249	245	45	47	44	45	47
R-4524	Non-Participating	348634	4788491	244	240	41	42	40	41	43
R-4526	Non-Participating	359461	4781552	238	234	44	46	44	45	47
R-4527	Non-Participating	356982	4781401	242	238	44	46	44	45	47
R-4528	Non-Participating	355148	4780474	249	245	47	49	47	48	50
R-4529	Participating	355010	4781976	249	245	51	53	51	52	54
R-4530	Non-Participating	354585	4783252	249	245	44	46	43	45	46
R-4531	Participating	354219	4783223	252	248	45	47	44	45	47
R-4532	Non-Participating	352030	4782552	264	260	43	44	42	43	45
R-4533	Participating	353038	4781711	249	245	43	44	42	43	45
R-4534	Non-Participating	351923	4781314	250	246	44	46	44	45	47
R-4535	Non-Participating	352185	4780962	251	247	44	46	43	45	46
R-4536	Participating	348671	4780754	249	245	52	54	51	53	54
R-4537	Non-Participating	348791	4779251	250	246	41	43	41	42	43
R-4538	Non-Participating	347836	4779889	249	245	44	46	44	45	47
R-4539	Non-Participating	346915	4781086	251	247	39	41	39	40	42
R-4540	Non-Participating	347046	4783012	249	245	42	44	41	43	44
R-4541	Non-Participating	351532	4786364	249	245	47	49	46	48	49
R-4542	Non-Participating	352306	4785781	249	245	42	43	41	42	44
R-4543	Non-Participating	352961	4785363	249	245	40	41	39	41	42
R-4544	Non-Participating	351830	4785455	254	250	41	43	40	42	43
R-4545	Non-Participating	353664	4785934	244	240	41	42	40	41	43
R-4546	Non-Participating	353375	4785816	247	243	41	43	40	42	43
R-4547	Participating	354218	4785776	244	240	39	40	38	40	41
R-4548	Non-Participating	354534	4786431	244	240	39	41	39	40	41
R-4549	Non-Participating	354979	4787255	244	240	40	41	39	41	42
R-4550	Participating	355466	4788105	239	235	44	46	43	45	46
R-4551	Non-Participating	354116	4788074	244	240	43	45	43	44	45
R-4552	Non-Participating	352821	4788105	247	243	43	45	42	44	45
R-4553	Participating	353421	4789352	252	248	47	49	46	47	49
R-4554	Non-Participating	352559	4789484	252	248	40	42	40	41	42
R-4555	Non-Participating	352486	4789990	254	250	38	40	38	39	40
R-4556	Non-Participating	353413	4789913	256	252	41	43	40	42	43
R-4557	Non-Participating	353265	4789782	254	250	42	43	41	42	44
R-4558	Non-Participating	353519	4789583	251	247	44	46	44	45	47
R-4559	Non-Participating	353418	4789572	252	248	44	46	43	45	46
R-4560	Non-Participating	353379	4789573	254	250	44	46	43	45	46
R-4561	Non-Participating	350376	4785522	259	255	41	43	41	42	44
R-4562	Non-Participating	348832	4782756	254	250	43	45	42	44	45
R-4563	Non-Participating	348470	4782978	254	250	45	46	44	45	47
R-4564	Non-Participating	348799	4782927	256	252	43	45	42	44	45
R-4565	Non-Participating	358257	4783359	236	232	39	41	39	40	42
R-4566	Non-Participating	362595	4782635	234	230	44	46	44	45	47
R-4568	Participating	365751	4786675	229	225	49	50	48	49	51
R-4570	Non-Participating	358886	4786712	247	243	47	47	47	47	47

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4571	Participating	358790	4786683	249	245	46	46	46	46	46
R-4572	Participating	358783	4786661	249	245	46	46	46	46	46
R-4573	Non-Participating	359102	4786621	240	236	48	49	48	49	49
R-4574	Non-Participating	359150	4787969	242	238	45	45	45	45	46
R-4575	Participating	363146	4787724	234	230	50	52	49	50	52
R-4576	Participating	364393	4784928	229	225	49	51	49	50	52
R-4577	Participating	364624	4786098	230	226	51	53	51	52	54
R-4580	Non-Participating	364340	4780371	232	228	40	42	40	41	43
R-4581	Non-Participating	364521	4781854	230	226	46	48	46	47	49
R-4585	Non-Participating	353672	4782929	256	252	46	48	45	47	48
R-4586	Non-Participating	348763	4783185	259	255	43	45	43	44	46
R-4587	Non-Participating	349723	4783170	259	255	43	45	42	44	45
R-4588	Non-Participating	351086	4780056	253	249	46	48	46	47	49
R-4589	Non-Participating	355128	4782691	249	245	45	47	45	46	48
R-4590	Non-Participating	355566	4783274	244	240	41	43	41	42	43
R-4594	Non-Participating	356315	4788216	239	235	46	48	46	47	48
R-4595	Non-Participating	350153	4787536	244	240	49	51	48	49	51
R-4596	Participating	351868	4787214	244	240	49	51	48	49	51
R-4597	Non-Participating	350925	4789453	244	240	41	42	40	41	43
R-4598	Non-Participating	355823	4787962	239	235	44	46	43	44	46
R-4599	Non-Participating	354994	4786750	242	238	39	40	38	40	41
R-4600	Participating	348298	4783242	253	249	48	50	47	49	50
R-4601	Non-Participating	358437	4788240	246	242	41	42	41	42	42
R-4602	Non-Participating	358505	4788224	249	245	41	42	41	42	43
R-4603	Non-Participating	358571	4788236	249	245	41	42	41	42	43
R-4604	Non-Participating	358621	4788237	249	245	42	42	42	42	43
R-4605	Non-Participating	358326	4787367	249	245	42	43	42	43	44
R-4606	Non-Participating	358105	4787283	249	245	42	42	42	42	43
R-4607	Non-Participating	358107	4787226	247	243	42	42	42	42	43
R-4608	Non-Participating	358334	4787261	245	241	43	43	43	43	44
R-4609	Non-Participating	358106	4787392	249	245	41	42	41	42	43
R-4610	Non-Participating	358252	4787173	244	240	42	43	42	43	43
R-4611	Non-Participating	358102	4787144	244	240	42	42	42	42	43
R-4612	Participating	358467	4787025	244	240	44	44	44	44	44
R-4613	Participating	358182	4786809	244	240	42	43	42	43	43
R-4614	Non-Participating	358275	4786415	241	237	42	43	42	43	43
R-4615	Non-Participating	358291	4786396	241	237	42	43	42	43	44
R-4616	Non-Participating	357691	4786526	239	235	40	41	40	41	42
R-4617	Participating	357635	4786616	239	235	40	41	40	41	41
R-4618	Non-Participating	356811	4786656	239	235	38	40	38	39	40
R-4619	Non-Participating	356860	4786609	239	235	38	40	38	39	40
R-4620	Non-Participating	357076	4786598	239	235	39	40	39	39	40
R-4621	Participating	356981	4786528	239	235	38	40	38	39	40
R-4622	Non-Participating	354990	4786569	242	238	38	40	38	39	41
R-4623	Non-Participating	355103	4786406	241	237	38	40	38	39	40
R-4624	Non-Participating	355355	4786642	240	236	38	40	38	39	41
R-4625	Non-Participating	355609	4786587	240	236	38	40	38	39	40
R-4626	Non-Participating	355689	4786510	241	237	38	39	38	39	40
R-4627	Non-Participating	355888	4786580	240	236	38	39	38	39	40
R-4628	Non-Participating	355880	4786449	241	237	38	39	37	39	40
R-4629	Non-Participating	355987	4786477	241	237	38	39	38	39	40
R-4630	Participating	356291	4786578	240	236	38	39	38	39	40
R-4631	Non-Participating	356436	4786592	239	235	38	39	38	39	40
R-4632	Participating	356624	4785798	241	237	37	39	37	38	40
R-4633	Participating	356615	4785693	242	238	37	39	37	38	39
R-4634	Participating	356761	4785728	242	238	37	39	38	38	40
R-4635	Non-Participating	356243	4784991	244	240	37	39	37	38	39
R-4636	Non-Participating	355205	4785144	244	240	37	39	37	38	40
R-4637	Non-Participating	355109	4785413	244	240	37	39	37	38	40

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4638	Non-Participating	355123	4785518	244	240	37	39	37	38	40
R-4639	Participating	355040	4785557	244	240	37	39	37	38	40
R-4640	Non-Participating	355144	4785845	244	240	37	39	37	38	40
R-4641	Non-Participating	354330	4785372	244	240	38	40	38	39	40
R-4642	Non-Participating	354381	4785158	244	240	38	40	38	39	40
R-4643	Non-Participating	354319	4784932	244	240	38	40	38	39	40
R-4644	Non-Participating	354314	4784882	244	240	38	40	38	39	40
R-4645	Non-Participating	358096	4788336	239	235	40	41	40	41	42
R-4646	Non-Participating	358201	4789659	239	235	38	39	38	39	40
R-4647	Non-Participating	358224	4788845	239	235	39	41	39	40	41
R-4648	Non-Participating	354377	4784777	244	240	38	40	38	39	40
R-4649	Non-Participating	354457	4784698	244	240	38	40	38	39	41
R-4650	Non-Participating	354578	4784794	244	240	38	40	38	39	40
R-4651	Non-Participating	354623	4784782	244	240	38	40	38	39	40
R-4652	Non-Participating	354673	4784767	244	240	38	40	38	39	40
R-4653	Participating	354901	4784658	244	240	38	40	38	39	40
R-4654	Non-Participating	354833	4784695	244	240	38	40	38	39	40
R-4655	Participating	355054	4784440	244	240	38	40	38	39	41
R-4656	Non-Participating	355307	4784434	244	240	38	40	38	39	40
R-4657	Non-Participating	355783	4784246	244	240	38	40	38	39	40
R-4658	Non-Participating	356388	4784092	243	239	38	39	38	39	40
R-4659	Non-Participating	356357	4784031	243	239	38	39	38	39	40
R-4660	Non-Participating	356678	4784516	244	240	37	39	37	38	40
R-4661	Non-Participating	357093	4785014	244	240	38	39	38	39	40
R-4662	Non-Participating	357388	4785011	244	240	38	39	38	39	40
R-4663	Non-Participating	357493	4785007	244	240	38	40	38	39	40
R-4664	Non-Participating	357644	4785008	242	238	38	40	39	39	40
R-4665	Participating	357711	4785010	240	236	39	40	39	40	41
R-4666	Non-Participating	358217	4785223	239	235	40	41	40	41	42
R-4667	Non-Participating	358303	4785421	239	235	41	42	41	42	42
R-4668	Non-Participating	358294	4785475	239	235	41	42	41	42	42
R-4669	Non-Participating	358189	4785745	239	235	41	42	41	42	42
R-4670	Participating	351602	4784767	254	250	39	41	39	40	42
R-4671	Non-Participating	351672	4784792	254	250	39	41	39	40	42
R-4672	Non-Participating	351725	4784796	254	250	39	41	39	40	42
R-4673	Non-Participating	351851	4784707	254	250	39	41	39	40	42
R-4674	Non-Participating	351826	4784624	255	251	39	41	39	40	42
R-4675	Non-Participating	351840	4784931	254	250	39	41	39	40	42
R-4676	Non-Participating	351925	4784923	254	250	39	41	39	40	42
R-4677	Non-Participating	352117	4784904	259	255	39	41	39	40	42
R-4678	Non-Participating	352359	4784969	259	255	39	41	39	40	42
R-4679	Non-Participating	352443	4784805	259	255	39	41	39	40	41
R-4680	Non-Participating	352644	4784968	256	252	39	41	39	40	41
R-4681	Participating	352772	4784840	252	248	39	40	38	40	41
R-4682	Non-Participating	353025	4784937	250	246	39	40	38	40	41
R-4683	Non-Participating	352931	4784938	250	246	39	41	38	40	41
R-4684	Non-Participating	353435	4784945	249	245	38	40	38	40	41
R-4685	Non-Participating	353537	4784943	249	245	38	40	38	39	41
R-4686	Non-Participating	353468	4784862	250	246	38	40	38	39	41
R-4687	Non-Participating	353516	4784858	250	246	38	40	38	39	41
R-4688	Non-Participating	353463	4784803	251	247	38	40	38	39	41
R-4689	Non-Participating	353450	4784679	251	247	38	40	38	39	41
R-4690	Non-Participating	353554	4784624	249	245	38	40	38	40	41
R-4691	Non-Participating	353544	4784525	249	245	38	40	38	40	41
R-4692	Non-Participating	353584	4784411	249	245	39	40	38	40	41
R-4693	Non-Participating	353715	4783806	249	245	40	42	40	41	43
R-4694	Non-Participating	361269	4788300	234	230	47	49	47	48	49
R-4695	Non-Participating	356440	4783420	239	235	39	41	39	40	41
R-4696	Non-Participating	356395	4783243	240	236	39	41	39	40	42

Receiver	Participation Status	UTM17N		Z (m)	GH (m)	Overall Noise Level (dBA)				
		Easting (m)	Northing (m)			Vestas V162-6MW STE	Nordex 169/5.X STE	Vestas V162-6.8MW STE	Vestas V162-7.2MW STE	Vestas V163-4.5MW STE
R-4697	Non-Participating	356694	4783453	239	235	38	40	38	40	41
R-4698	Non-Participating	356671	4783530	239	235	38	40	38	39	41
R-4699	Non-Participating	356631	4783665	240	236	38	40	38	39	41
R-4700	Non-Participating	356858	4783277	239	235	39	40	38	40	41
R-4701	Non-Participating	357072	4783408	239	235	38	40	38	39	41
R-4702	Non-Participating	357155	4783407	239	235	38	40	38	39	41
R-4703	Non-Participating	357205	4783327	239	235	38	40	38	39	41
R-4704	Non-Participating	357265	4783310	239	235	38	40	38	39	41
R-4705	Non-Participating	357277	4783409	239	235	38	40	38	39	41
R-4706	Non-Participating	357350	4783171	239	235	39	40	38	40	41
R-4707	Non-Participating	357415	4783315	239	235	38	40	38	39	41
R-4708	Non-Participating	357472	4783265	239	235	38	40	38	40	41
R-4709	Non-Participating	353193	4784809	252	248	38	40	38	40	41
R-4710	Non-Participating	352082	4784786	256	252	39	41	39	40	42
R-4711	Participating	363311	4781156	234	230	41	43	41	42	44
R-4712	Non-Participating	362978	4780635	234	230	39	40	38	40	41
R-4713	Non-Participating	363064	4780582	234	230	39	40	38	40	41
R-4714	Non-Participating	363016	4780338	234	230	38	40	38	39	40
R-4715	Non-Participating	362945	4780202	234	230	37	39	37	38	40
R-4716	Non-Participating	363501	4780227	234	230	38	40	38	39	41
R-4717	Non-Participating	363630	4780240	234	230	38	40	38	39	41
R-4718	Non-Participating	357233	4783801	242	238	38	39	38	39	40
R-4719	Non-Participating	357133	4783694	241	237	38	40	38	39	40
R-4720	Non-Participating	356795	4783228	240	236	39	41	39	40	41
R-4721	Non-Participating	358787	4788229	249	245	42	43	42	43	43
R-4722	Non-Participating	358477	4788071	249	245	42	42	42	42	43
R-4723	Non-Participating	358742	4788165	249	245	42	43	42	43	43
R-4724	Non-Participating	358818	4788165	248	244	42	43	42	43	44
R-4725	Non-Participating	363725	4780223	234	230	38	40	38	39	41
R-4726	Non-Participating	363729	4779964	234	230	38	39	37	39	40
R-4727	Non-Participating	353839	4785111	244	240	38	40	38	39	41
R-4728	Non-Participating	353905	4784965	245	241	38	40	38	39	41
R-4729	Non-Participating	358688	4785835	238	234	43	44	43	44	44
R-4730	Participating	356934	4783284	239	235	39	40	38	40	41
R-4731	Participating	358390	4782938	236	232	41	42	40	42	43
R-4732	Non-Participating	356708	4783299	240	236	39	40	39	40	41
R-4733	Non-Participating	357811	4783267	238	234	39	40	39	40	41
R-4734	Non-Participating	356990	4784200	242	238	37	39	38	39	40
R-4735	Non-Participating	347312	4784545	244	240	42	44	41	43	44
R-4736	Non-Participating	347714	4779863	249	245	43	45	43	44	46
R-4737	Non-Participating	350352	4784397	254	250	40	42	39	41	42
R-4738	Non-Participating	353435	4784507	249	245	38	40	38	40	41
R-4739	Non-Participating	357478	4783855	241	237	38	40	38	39	40
R-4740	Non-Participating	358200	4784195	239	235	39	40	39	40	41
R-4741	Non-Participating	358325	4783401	236	232	40	41	39	41	42
R-4742	Non-Participating	361589	4783408	234	230	47	49	47	48	50
R-4743	Non-Participating	366432	4785340	229	225	43	45	43	44	46
R-4744	Non-Participating	354496	4783380	249	245	43	45	43	44	45
R-4745	Non-Participating	353552	4785166	247	243	39	40	38	40	41
R-4746	Non-Participating	353536	4785349	246	242	39	41	39	40	41
R-4747	Non-Participating	353641	4786100	244	240	41	43	41	42	44
R-4748	Non-Participating	347222	4783480	249	245	45	47	44	46	47
R-4749	Non-Participating	351973	4785031	254	250	39	41	39	40	42
R-4750	Non-Participating	353038	4784738	253	249	38	40	38	40	41

APPENDIX C

Noise Level Contour Figures

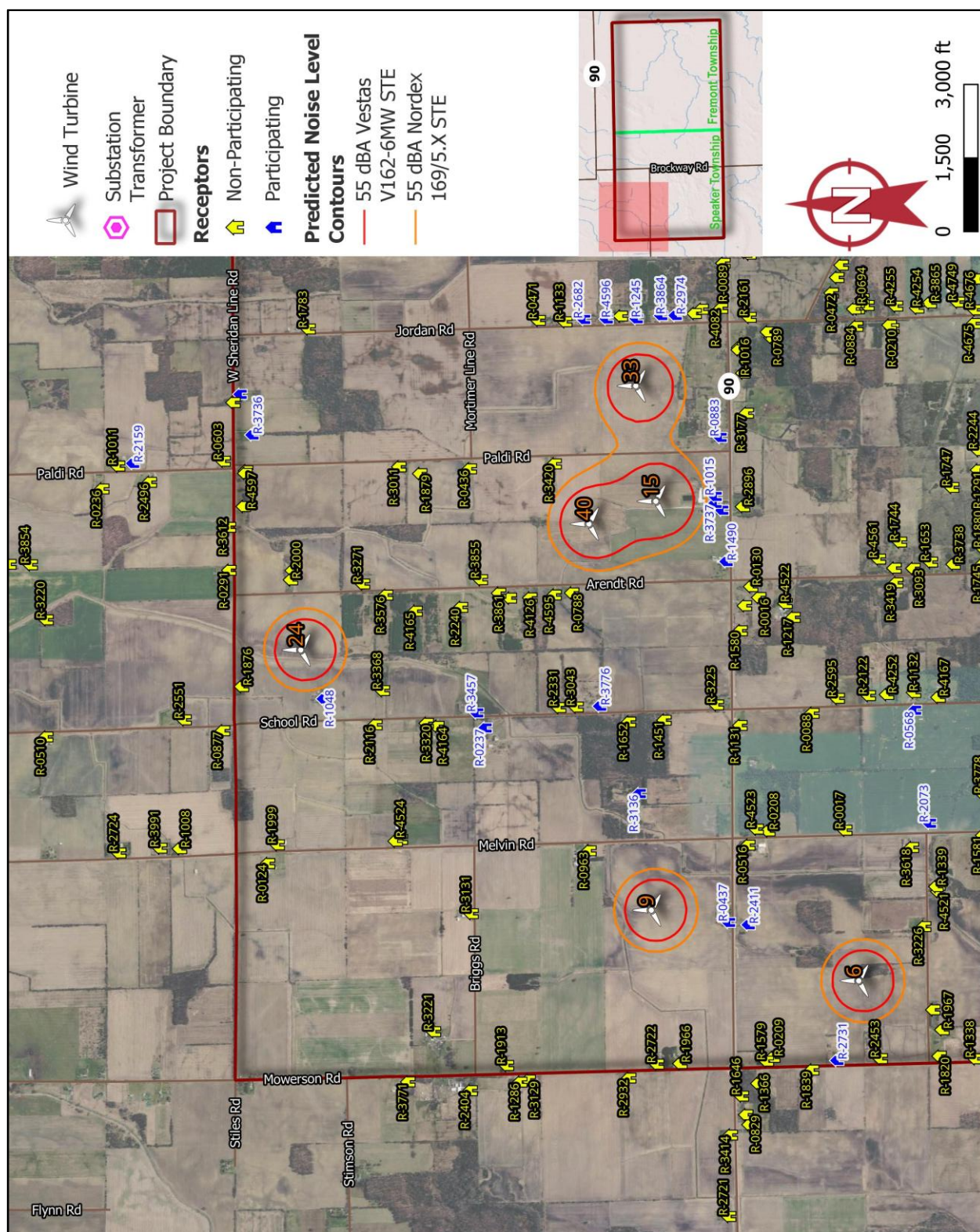


Figure C-1. Predicted Noise Level Contours – Northwest Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

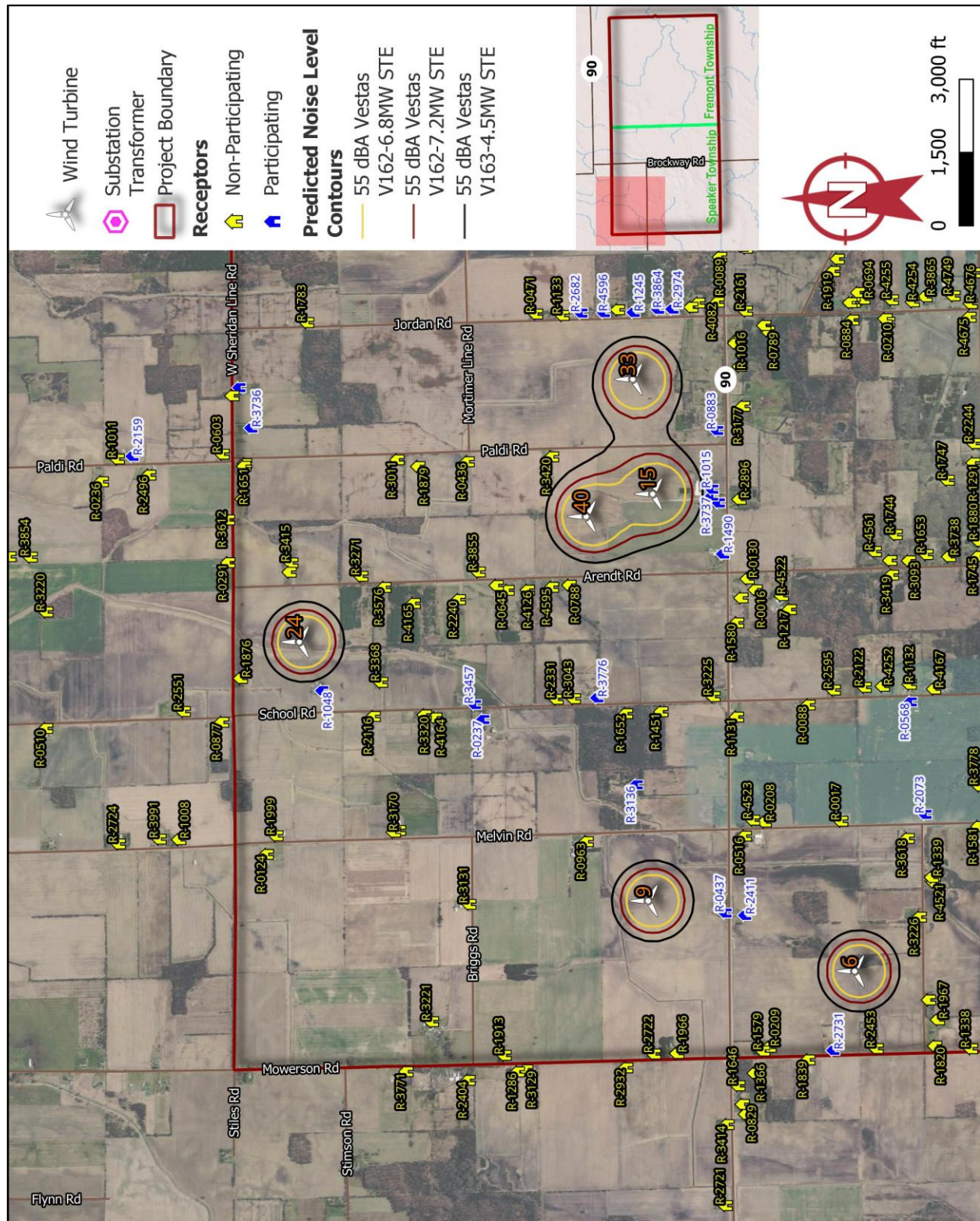


Figure C-1. Predicted Noise Level Contours – Northwest Portion (Cont.)





Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

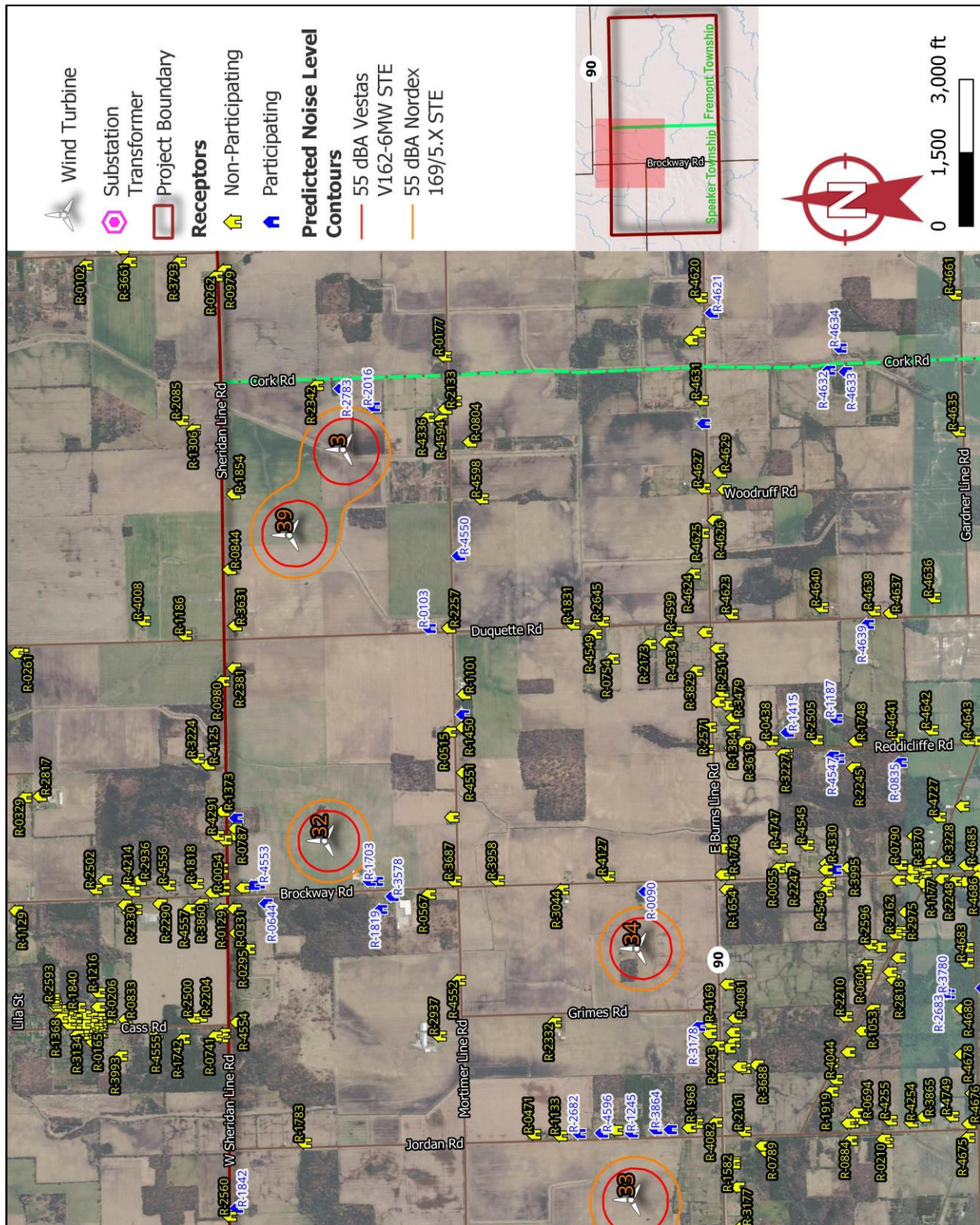


Figure C-3. Predicted Noise Level Contours – North Portion



Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

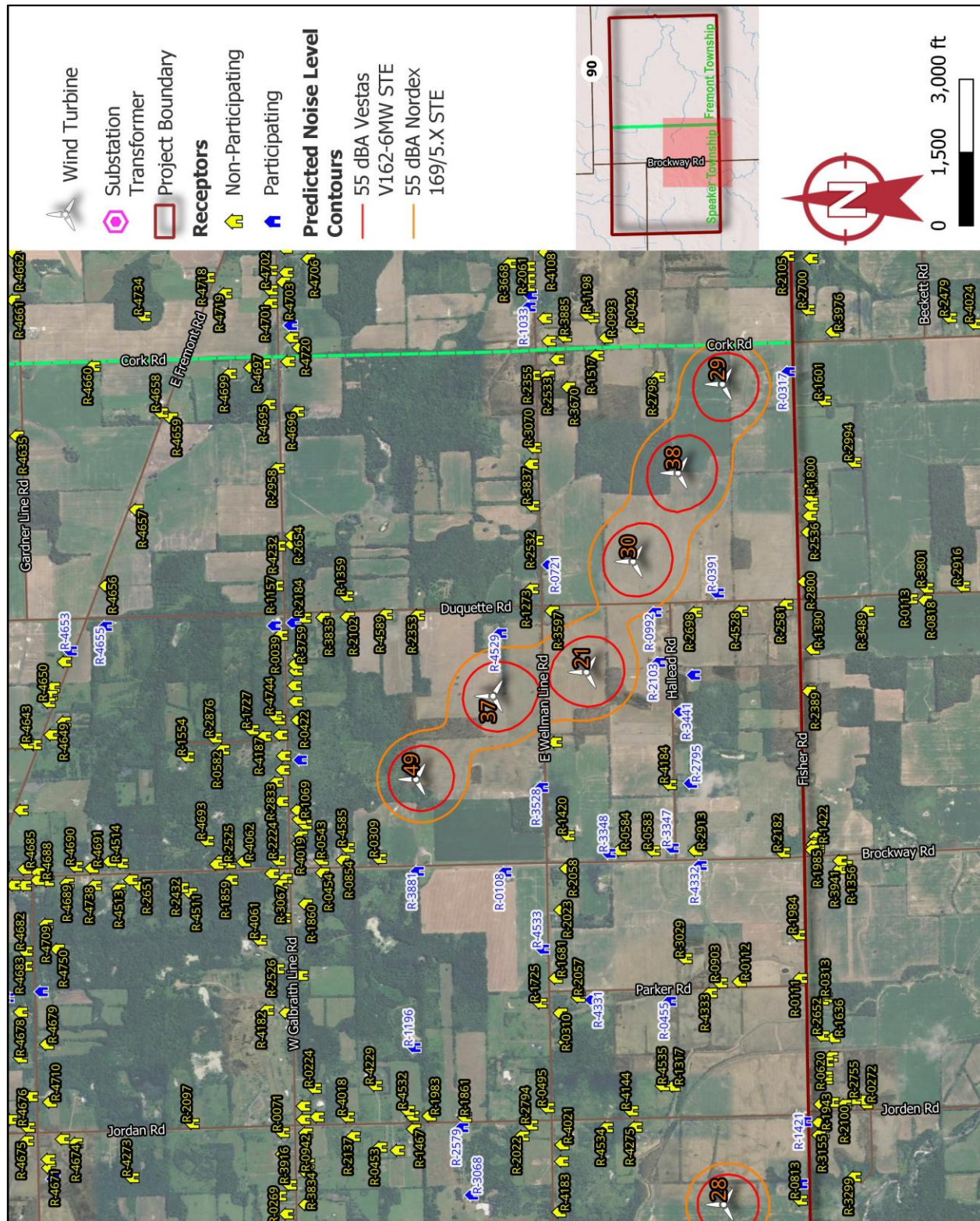


Figure C-4. Predicted Noise Level Contours – South Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

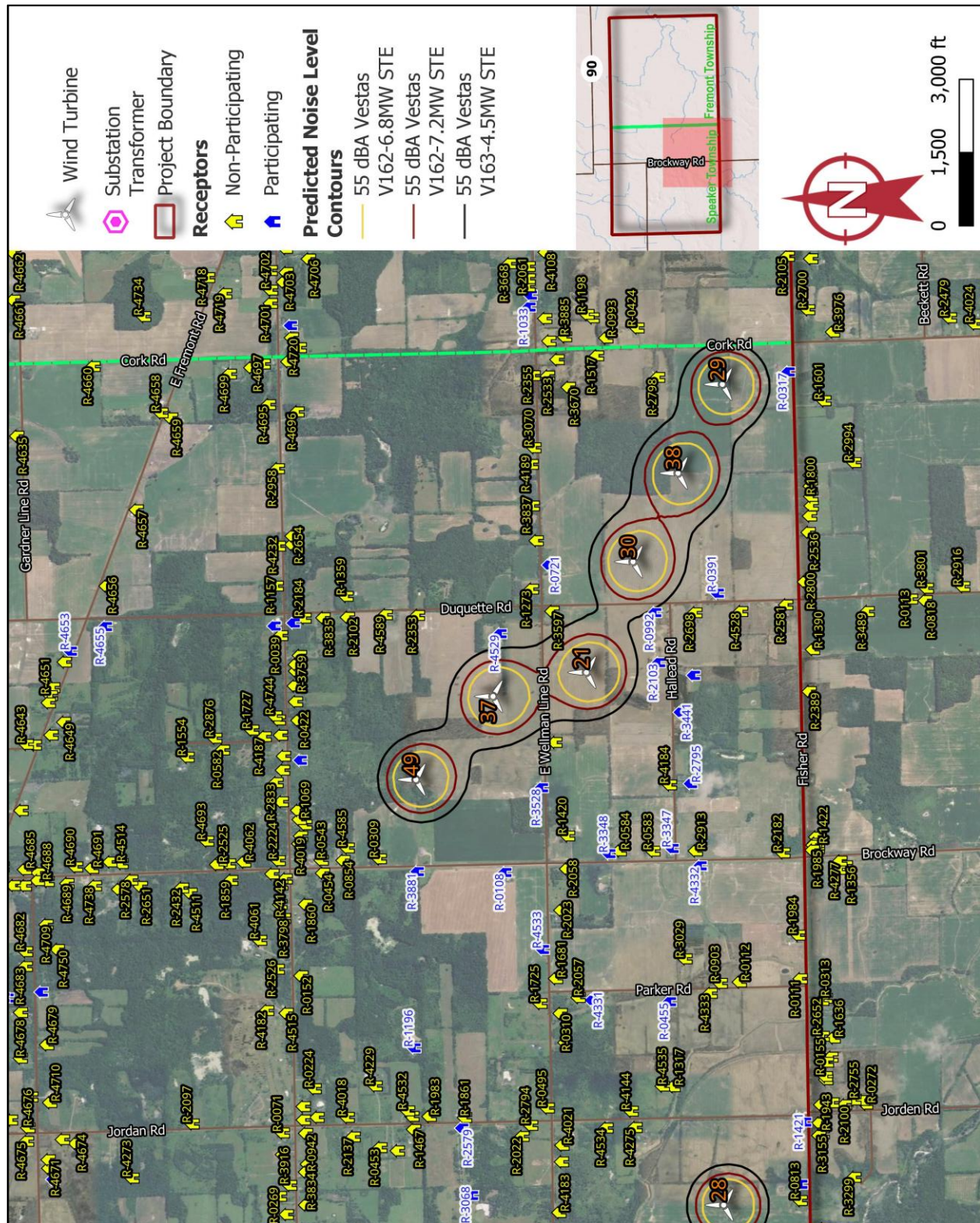


Figure C-4. Predicted Noise Level Contours – South Portion (Cont.)

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

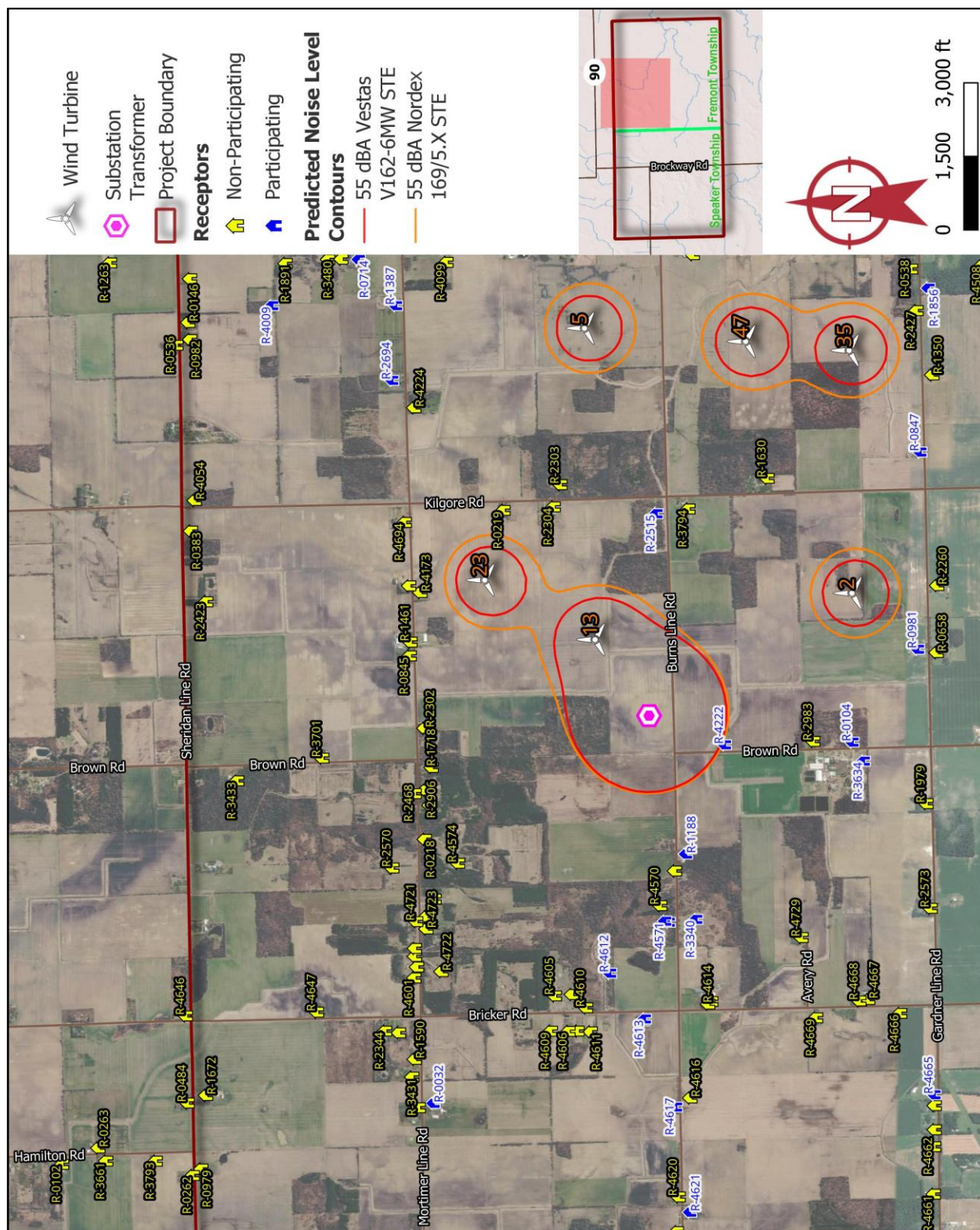


Figure C-5. Predicted Noise Level Contours – North-Central Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

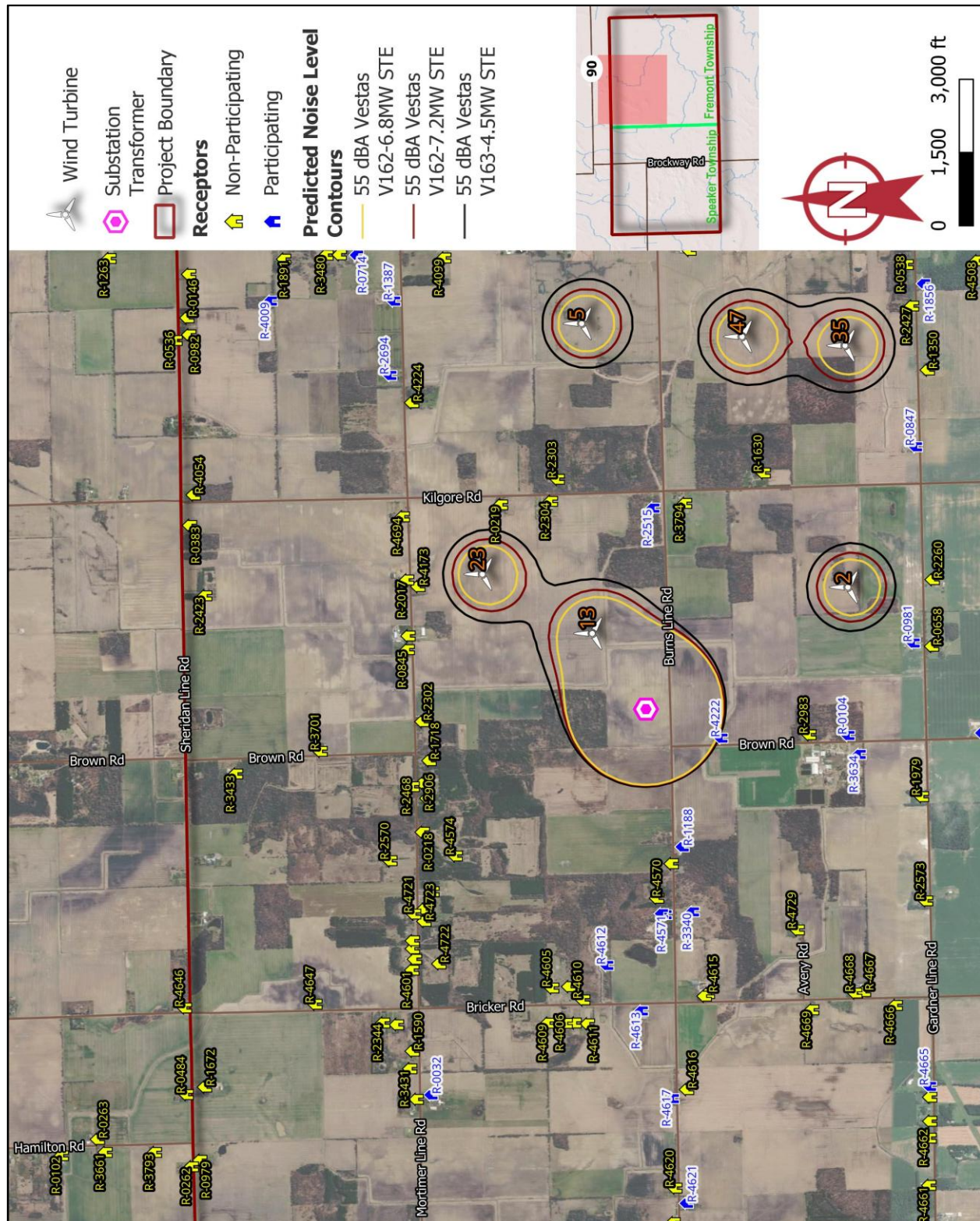


Figure C-5. Predicted Noise Level Contours – North-Central Portion (Cont.)

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

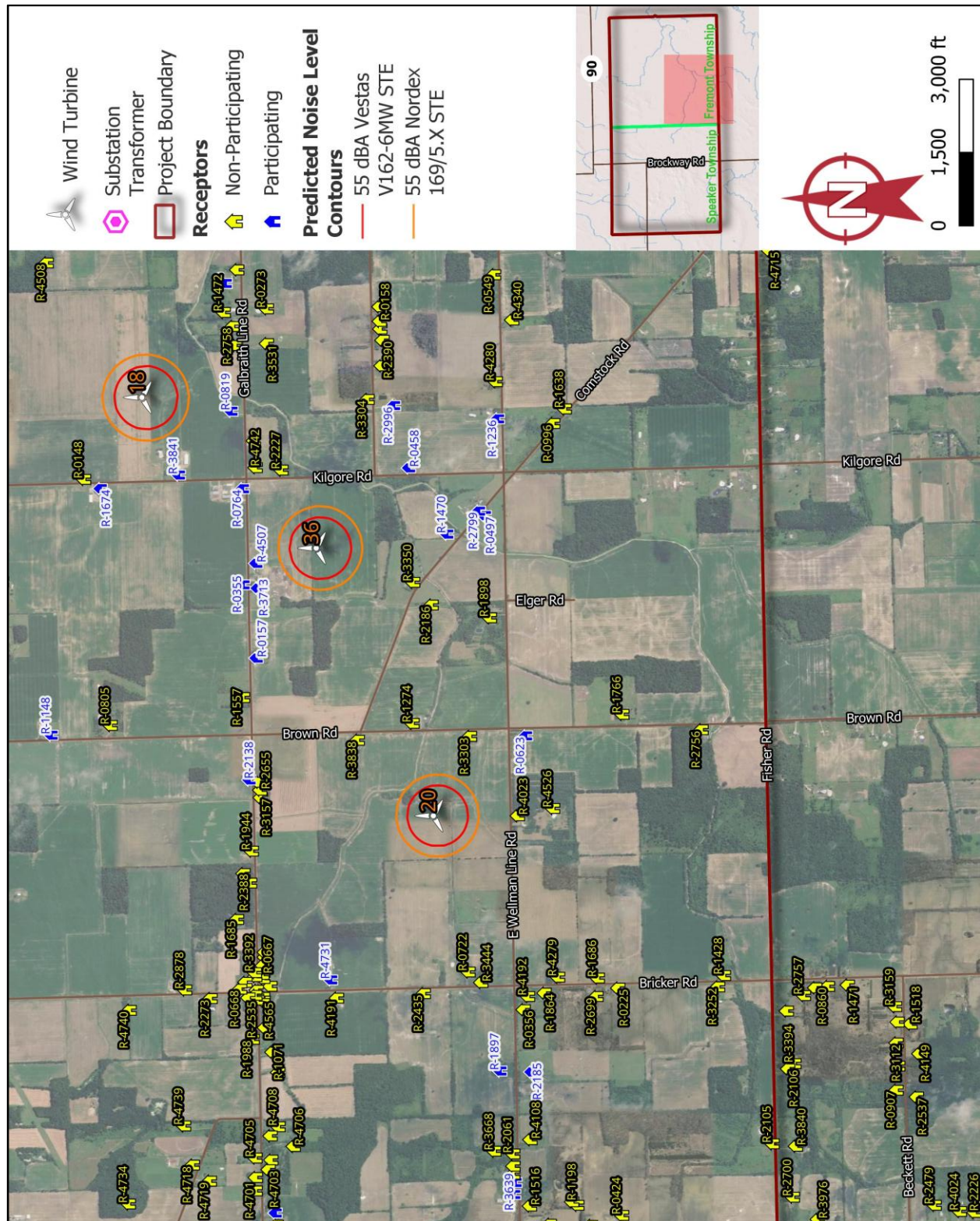


Figure C-6. Predicted Noise Level Contours – South-Central Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

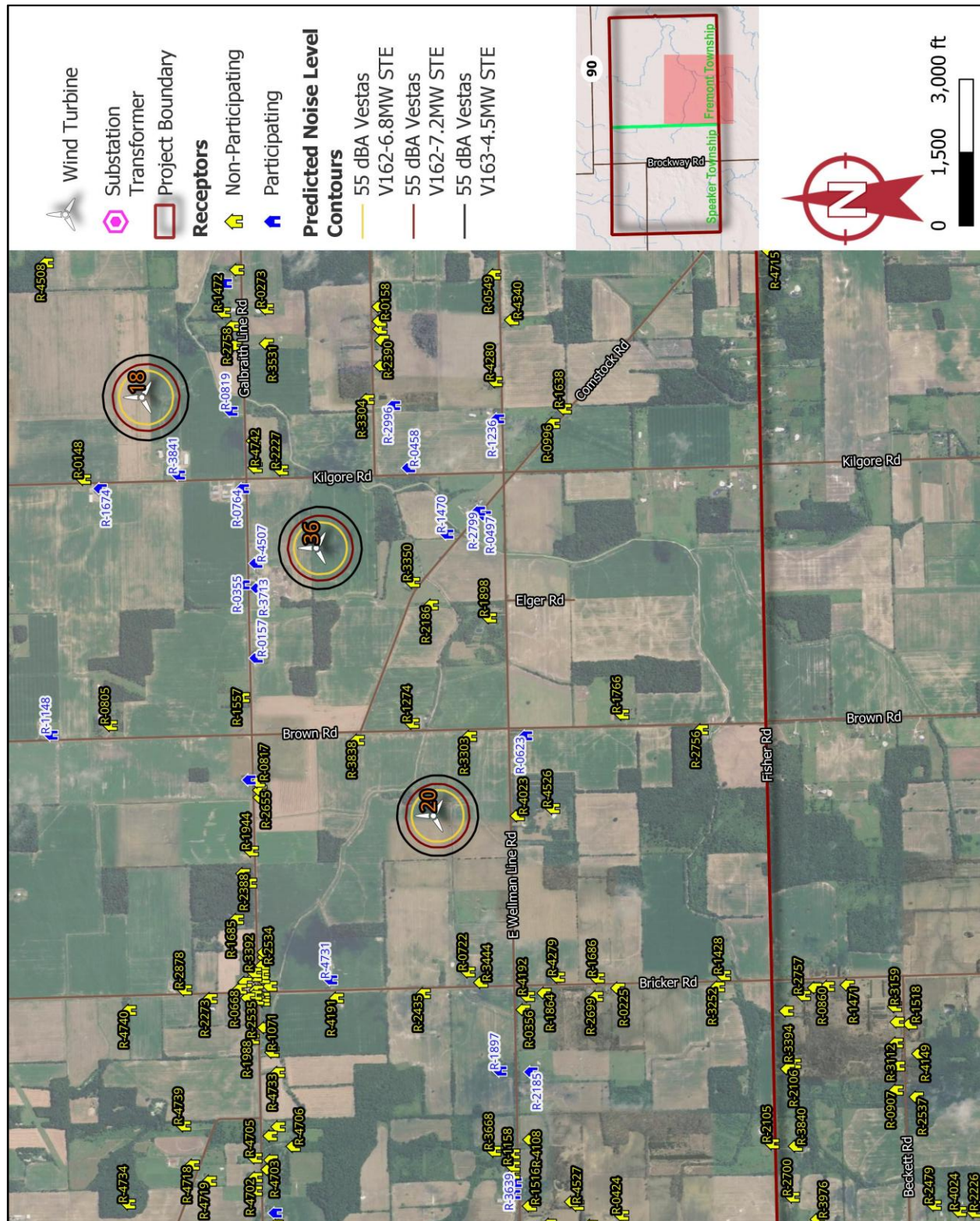


Figure C-6. Predicted Noise Level Contours – South-Central Portion (Cont.)



Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility



Figure C-7. Predicted Noise Level Contours – Northeast Portion (Cont.)

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

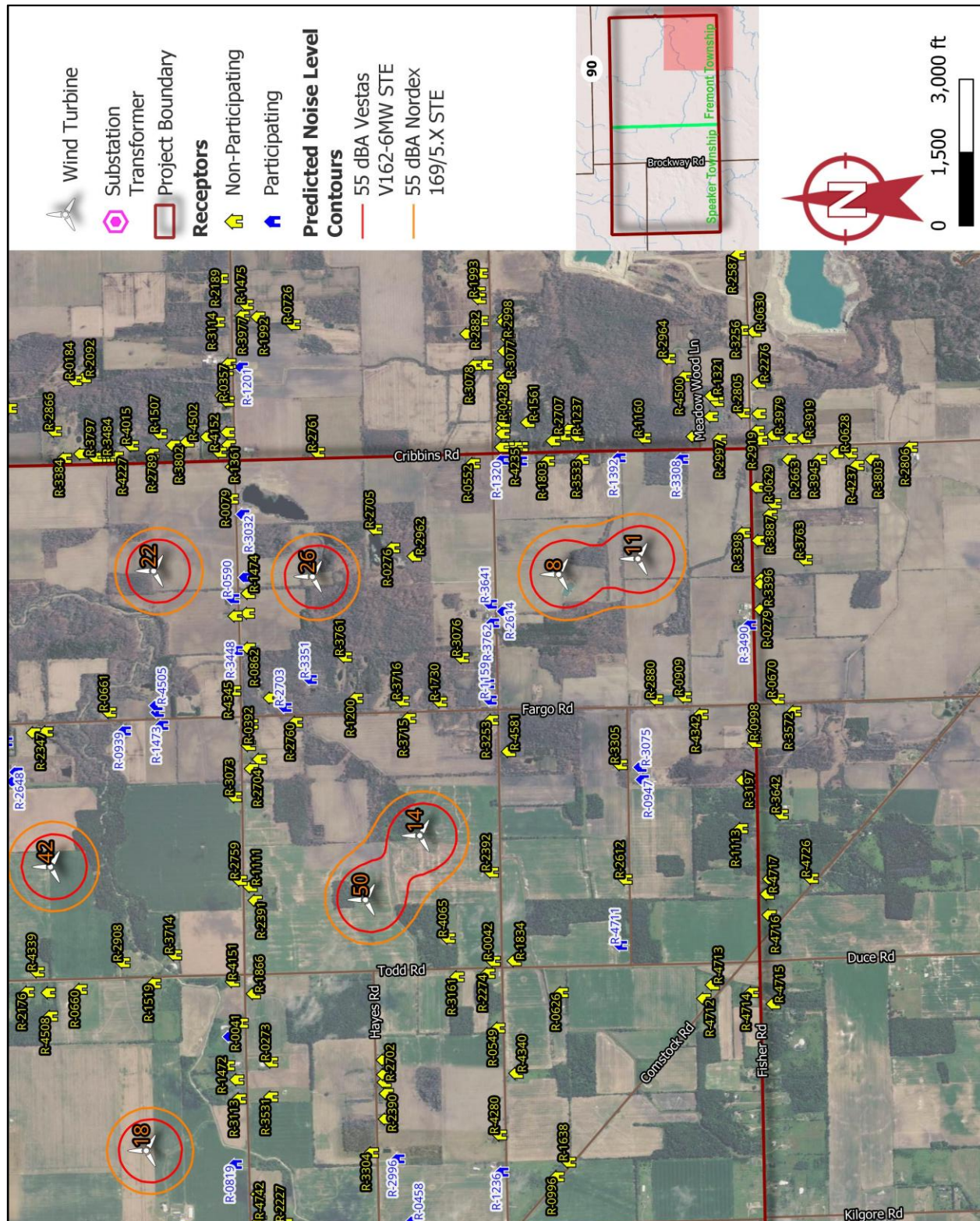


Figure C-8. Predicted Noise Level Contours – Southeast Portion

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

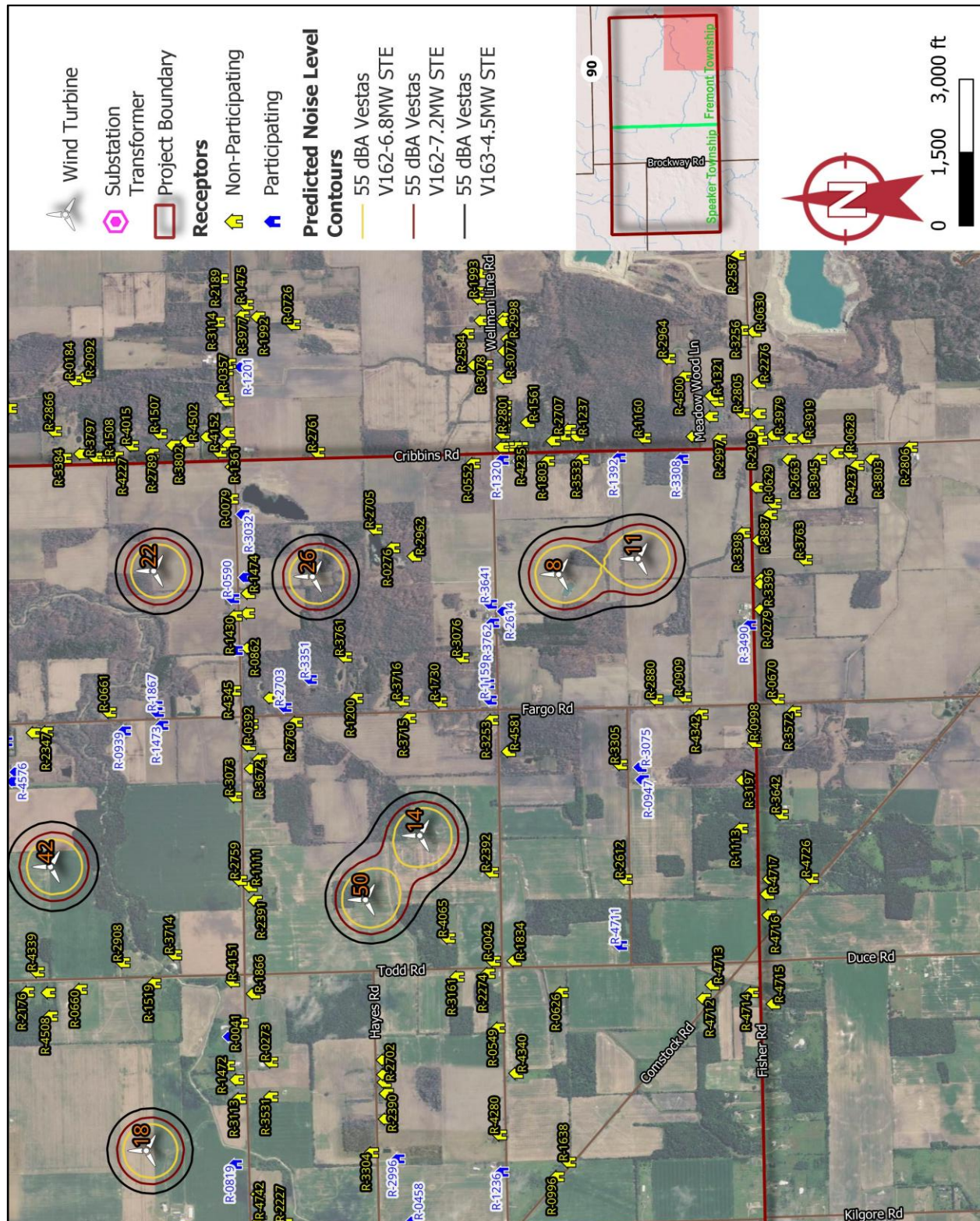


Figure C-8. Predicted Noise Level Contours – Southeast Portion (Cont.)

APPENDIX D

Ambient Noise Level Survey

D1. Ambient Noise Measurement Procedures

A background (ambient) noise level survey was conducted in the Project Area to characterize and document pre-construction noise levels. The survey was conducted between June 25 and July 16, 2024. The measurement survey was carried out in conformance with the requirements of a protocol mutually agreed to between Riverbend Wind and the acoustic consultant hired by Speaker Township. The measurement procedures and methodologies employed are consistent with MPSC requirements.

D1.1 Measurement Locations

In general, the Project study area is rural/agricultural with a relatively low density of residences. Significant roads in the area include Galbraith Line Road, which runs east to west through the central portion of the Project, State Highway 90, which runs east to west through central and northern portions of the Project, and State Highway 19, which runs north to south bisecting the Project. Other than traffic and natural sounds (birds, insects, wind), existing sources of noise include occasional agricultural operations, aircraft overhead, and the activities of residents (e.g., lawn mowing).

Noise levels were measured at six locations representative of the non-participating noise-sensitive receptors located closest to the Project. Noise measurement locations are shown in Figure D-1 and general coordinates are provided in Table D-1. Detailed maps and photographs of each measurement location are provided at the end of this appendix. The selection of the measurement locations considered several factors, including proximity to the proposed Project turbines, proximity to existing noise sources and roadways, farm and non-farm settings and their local activities and noise sources, and access to land and equipment security. The measurement points were selected to be representative of rural non-participating residences, both close to and removed from existing sources of noise, which would be most impacted by the Project.

Also, a factor in the site selection was to achieve a relatively even geographical distribution of measurement locations across the Project area. A description of the locations is as follows:

- Fremont 1 (F1) is in the east-central portion of Fremont Township, along Fargo Road, between the intersections with Gardner Line Road and Burns Line Road.
- Fremont 2 (F2) is in the northeast portion of Fremont Township, along Mortimer Line Road, between the intersections with Fargo Road and Cribbins Road.
- Fremont 3 (F3) is located in the southwestern portion of Fremont Township, along Bricker Road, between the intersections with Galbraith Line Road and Wellman Line Road.
- Speaker 1 (S1) is located in the southeast portion of Speaker Township, along Duquette Road, near the intersection with Wellman Line Road.
- Speaker 2 (S2) is approximately centrally located in Speaker Township, along Jordan Road, near the intersection with State Highway 90.
- Speaker 3 (S3) is located near the northeastern boundary of Speaker Township, along Cork Road, between the intersections with Sheridan Line Road and Mortimer Line Road.

Pre-Construction Wind Turbine Noise Analysis for the Proposed Riverbend Wind Energy Facility

Table D-1. Ambient Noise Measurement Locations

Measurement Location	Easting (UTM 17)	Northing (UTM 17)
F1	365202	4783555
F2	365562	4788372
F3	358400	4782931
S1	355144	4781549
S2	351882	4786921
S3	350255	4782171

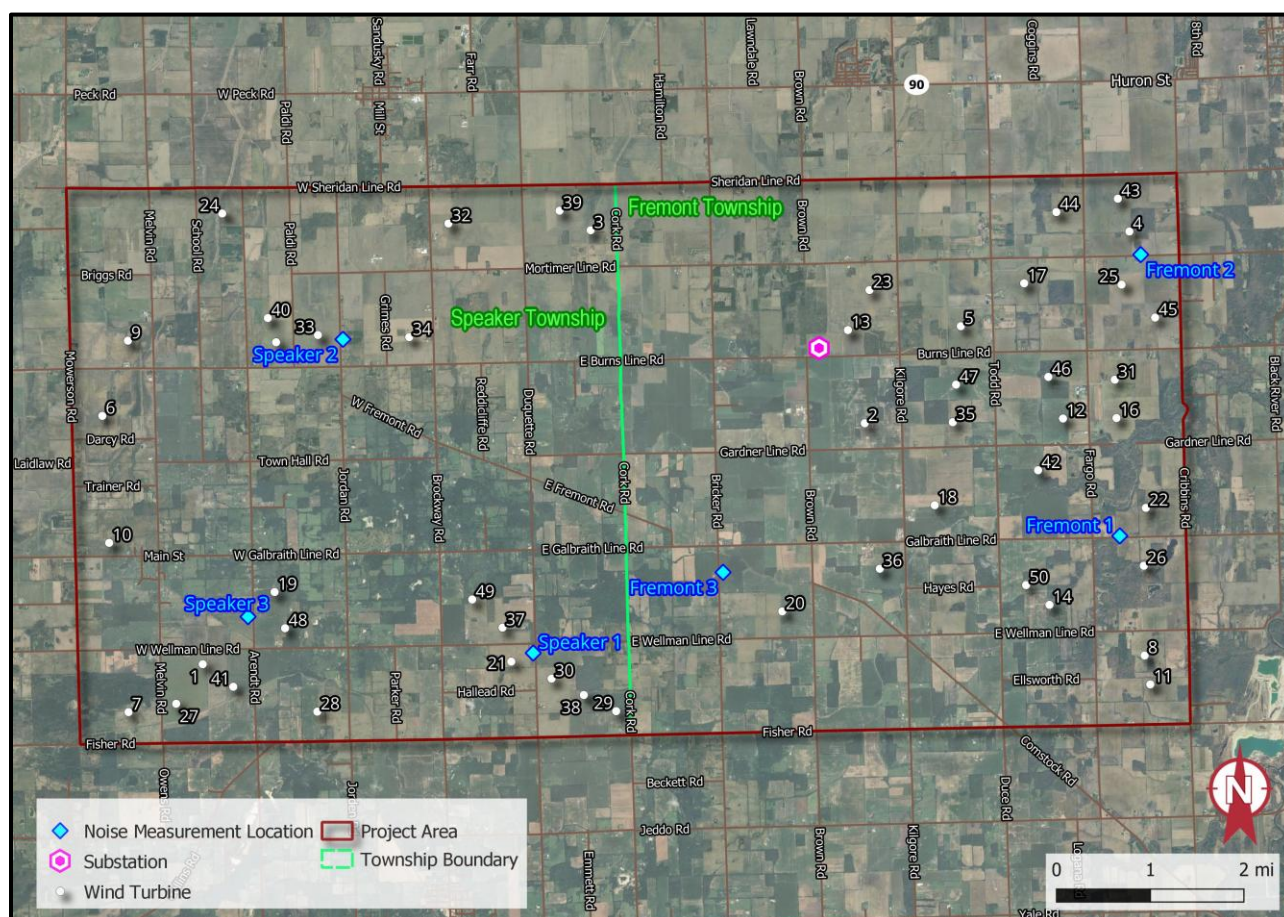


Figure D-1. Location of Project and Noise Measurement Locations

D1.2 Measurement Procedures

The long-term noise monitors continually measured ambient sound levels over the course of 20 days. For the most part, the measurement equipment was left to continuously measure noise and wind data unattended. Hankard Environmental staff made observations during daytime and nighttime hours for each visit to the Project area, noting environmental noise sources at each measurement location. These included equipment installation (June 25-26), and retrieval (July 15-16). Additionally, the Project supplied Hankard Environmental with wind speed data measured at a height of 60 meters from the Project's local meteorological tower. This data was used to

estimate when existing turbines would have been operational during the long-term measurements.

Sound levels were measured using Larson Davis models 831 meters that meet the provisions for Type 1 meters per ANSI S1.4. All sound level meters were calibrated on location prior to the measurements using a handheld calibrator and were calibrated by an accredited laboratory within 18 months of use.

The microphones were covered with hydrophobically treated, seven-inch diameter, 80 pores-per-inch density windscreens to reduce the influence of wind-induced noise. The microphones were mounted on a fixed post or tripod and positioned five feet above the ground and, with the exception of measurement location S3, at least 25 feet away from acoustically reflective surfaces per ANSI S12.9 Part 3. Due to land access, measurement location S3 was closer than 25 feet away from acoustically reflective surfaces. Wind speeds were measured continuously at the long-term monitoring sites using a Vaisala sonic anemometer.

The sound level meters were configured to collect the following data in 10-minute intervals:

- a. Unweighted octave band and one-third octave band noise levels (16 through 10,000 Hz).
- b. Overall A-weighted noise levels in the following metrics: L_{eq} , L_{10} , L_{50} , and L_{90} .

Table D-2. Noise and Meteorological Measurement Equipment

Instrument Type	Manufacturer	Model
Sound Level Meter	Larson Davis	831
Sound Level Meter	Larson Davis	831C
Preamplifier	Larson Davis	PRM831
½" Microphone	Larson Davis	377B02
Windscreen	ACO Pacific	WS7-80T
Acoustic Calibrator	Larson Davis	CAL200
Wind Data	Vaisala	WXT532
Meteorological and Wind Data	Vaisala	WXT536
External Audio Recordings	Tascam	DR-05X

D1.3 Analysis Procedures

The 10-second measurement data was used to calculate one-hour statistical noise level metrics. Ten-second samples with precipitation were removed from the analysis. The results are primarily presented herein in terms of four metrics: the A-weighted L_{eq} which represents the average sound level over a given measurement interval (one hour for this analysis), the A-weighted L_{10} which represents the level exceeded 10% the measurement interval and is influenced by high-level extraneous noises such as wind gusts and local traffic, the A-weighted L_{50} which represents the level exceeded 50% of the time, and the A-weighted L_{90} which represents the level exceeded 90% of the time over the measurement interval. The L_{90} filters out sporadic noises to some degree and is representative of the quiet, consistent levels occurring within the interval.

D1.4 Ambient Noise Levels Versus Wind Speed

A unique feature of wind turbine projects, versus other industrial noise sources, is that they only operate when it is windy at the height of the rotor. When this occurs there is almost always some degree of wind at tree- and ground-level, which generates noise as it passes through vegetation (trees, shrubs, crops, etc.) The noise from vegetation rustle can, at times, mask the noise from the wind turbines. The level of noise created by the wind is a function of the wind speed and the presence of, and type of, nearby vegetation (particularly trees). In the Project area there are many residences located near or within large stands of trees.

To assess how much noise is generated by the wind the measured ambient noise levels were plotted versus the concurrently measured on-site hub-height wind speed on an hourly basis. Wind speed at hub height was calculated by first determining the one-hour wind shear exponents using ground wind speeds measured at each measurement location and wind speeds measured by the Project's meteorological towers at a height of 60 meters above the ground. This wind shear exponent along with the meteorological tower data, was then used to extrapolate the wind speeds at hub height using the power law vertical extrapolation method.

D2. Measurement Analysis Results

D2.1 Overall Measurement Analysis Results

Sources of existing noise commonly observed in the area were natural sounds such as birds calling, wind noise, and rustling vegetation. Other sources of noise included distant traffic at some locations (Highway 90, and Galbraith Line Road), local traffic, agricultural operations, dog barks, and aircraft passing overhead. The following general observations about the existing sound levels in the study area can be drawn from the measurement results:

- In general, local and distant traffic are the most common sources of existing sound. State Highway 90 and Galbraith Line Road are significant sources of existing sound and consistently influence sound levels at the locations S2 and F1 during both daytime and nighttime.
- Noise levels at all sites show a diurnal pattern, with daytime L_{90} noise levels regularly reaching 40 dBA, and nighttime noise L_{90} dBA levels in the 20s and 30s.
- From the level versus time figures, the effect of wind on sound levels is clear. For example, on June 28, 2024, L_{90} sound levels reached 45 dBA during high winds. On most other days the L_{90} sound level does not exceed 40 dBA.
- Measurements conducted under conditions conducive for wind turbine operations showed greater measured values by 2-3 dBA due to wind-induced noise.

The measured sound levels are summarized in Table D-3. The daytime L_{eq} across all six locations ranged from 39 to 53 dBA with an average of 44 dBA, and L_{90} levels ranged from 30 to 35 dBA with an average of 32 dBA. The nighttime L_{eq} across all six locations ranged from 33 to 45 dBA with an average of 37 dBA, and L_{90} levels ranged from 25 to 32 dBA with an average of 27 dBA. Plots of the measured noise levels versus time for each long-term measurement location can be found at the end of this appendix. A sample noise level versus time plot is shown in Figure D-2.

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

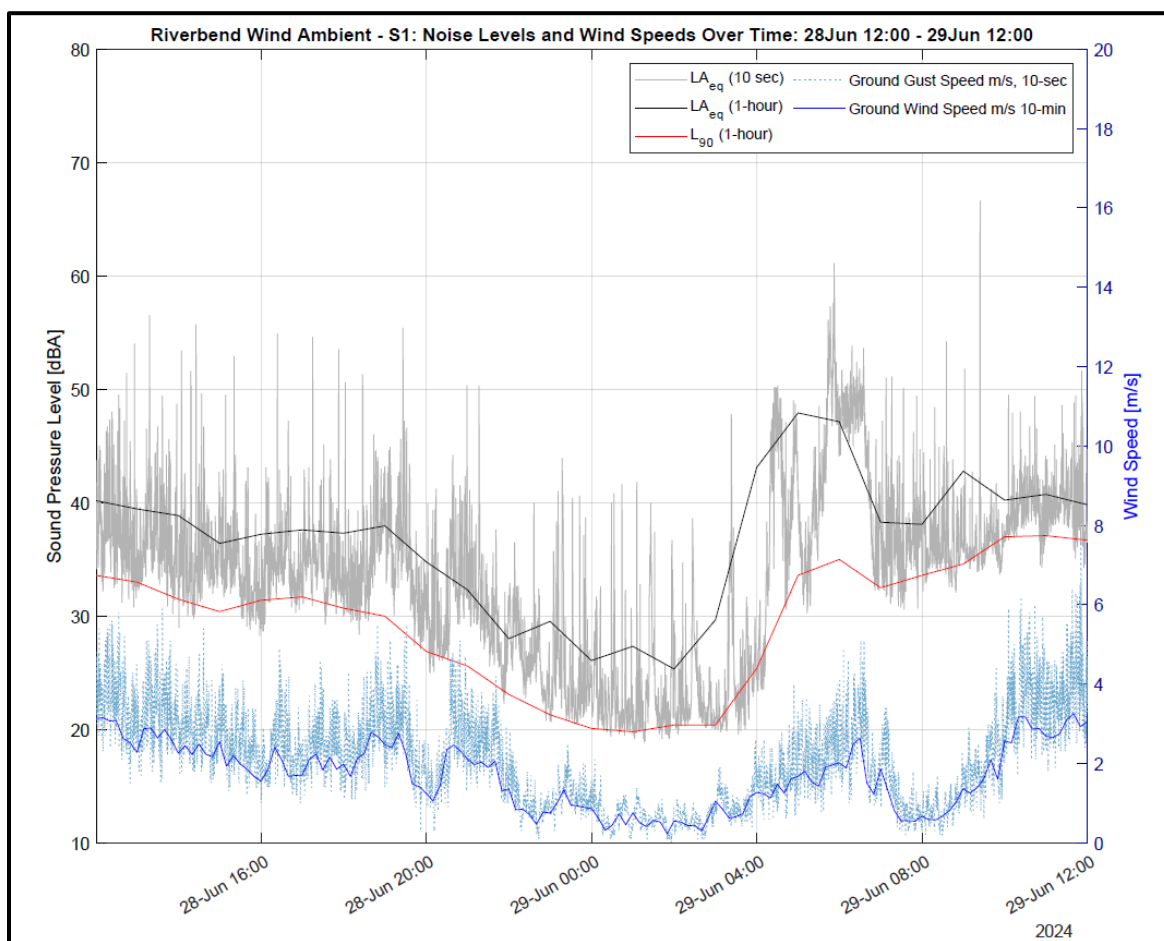


Figure D-2. Sample Time Plot of Long-Term Background Noise Levels at S1

Table D-3. Summary of Measured Ambient Noise Levels – All Conditions

Location	Daytime Noise Levels (dBA)				Nighttime Noise Levels (dBA)				Overall Noise Levels (dBA)			
	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{eq}	L ₁₀	L ₅₀	L ₉₀	L _{eq}	L ₁₀	L ₅₀	L ₉₀
F1	53	57	42	34	45	43	32	27	50	52	38	31
F2	45	45	37	32	35	36	31	27	41	42	35	30
F3	42	44	35	30	35	36	29	25	40	41	33	28
Fremont Average	47	49	38	32	39	39	30	26	44	45	35	30
S1	39	40	34	31	34	36	30	27	37	39	33	29
S2	43	45	39	35	39	40	35	32	42	43	38	34
S3	41	43	36	32	33	35	30	26	38	40	34	30
Speaker Average	41	43	37	32	35	37	32	28	39	41	35	31
Site-Wide Average	44	46	37	32	37	38	31	27	41	43	35	30

D2.2 Wind Regression Analysis Results

The results of this analysis for all locations are shown on an L_{eq} , L_{10} , L_{50} , and an L_{90} basis in Table D-4. All the levels shown in the table were measured when the nearest turbines would be operating at full noise emissions. On an L_{90} basis, levels are as low as 19 dBA when there is a large degree of separation between ground-level and hub-height wind speeds, and as high as 45 dBA when there is little separation. On an L_{50} basis, levels are as low as 19 dBA and reach over 55 dBA but are generally in the mid 30's dBA. Figure D-3 shows an example result for location S1 during the nighttime period. In this example, mean L_{50} levels are approximately 30 dBA at a hub-height wind speed of 9 m/s or greater on average.

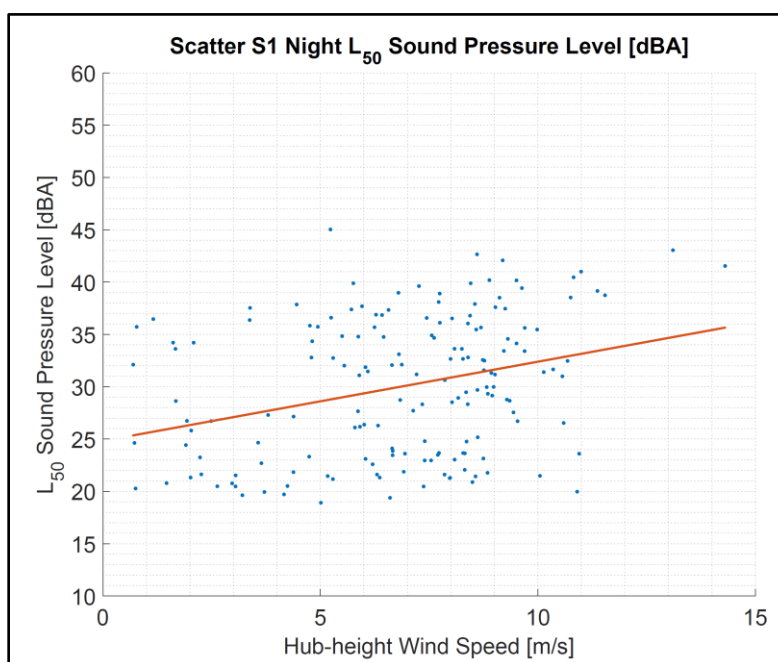


Figure D-3. Sample Ambient Noise Levels vs. Wind Speed Regression

Table D-4. Ambient Noise Levels - Full Turbine Acoustic Emissions

Location	Daytime Noise Levels (dBA)				Nighttime Noise Levels (dBA)				Overall Noise Levels (dBA)			
	L_{eq}	L_{10}	L_{50}	L_{90}	L_{eq}	L_{10}	L_{50}	L_{90}	L_{eq}	L_{10}	L_{50}	L_{90}
F1	54	58	47	40	47	46	35	30	51	53	42	36
F2	49	51	45	41	38	40	35	31	44	46	41	37
F3	46	49	42	38	36	37	31	28	41	43	37	32
Fremont Average	50	52	45	39	41	41	34	30	45	47	40	35
S1	42	45	39	35	37	39	34	30	40	42	37	33
S2	45	46	42	39	40	41	37	34	42	44	40	36
S3	44	46	41	37	34	36	32	28	39	41	36	32
Speaker Average	44	46	41	37	37	39	34	31	40	42	37	34
Site-Wide Average	47	49	43	38	39	40	34	30	43	45	39	34

D2.3 Comparison of Existing and Predicted Noise Levels

Project noise levels were predicted and used to compare to measured ambient noise levels to quantify the noise impacts from the Project.

Noise levels were predicted using the method prescribed by International Organization for Standardization (ISO) Standard 9613-2:2024, Attenuation of Sound During Propagation Outdoors and implemented using the SoundPLAN v9.1 software program. Detailed information describing the input data and settings used with the ISO 9613-2:2024 method to predict noise levels from the Project can be found in the pre-construction report above. Table D-5 shows the measured ambient L_{eq} , L_{10} , L_{50} , and L_{90} levels and the corresponding predicted levels for each measurement location. Also shown in the table is the total noise (existing ambient plus predicted noise level) and the increase over ambient levels from total noise levels.

Table D-5. Predicted Operational and Measured Ambient Noise Levels

Noise Contribution	Site	Vestas V162-6.0MW STE				Nordex 169-5.0 LNTE mode 0			
		L_{eq} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)	L_{eq} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)
Ambient Noise Levels	F1	51	53	42	36	51	53	42	36
	F2	44	46	41	37	44	46	41	37
	F3	41	43	37	32	41	43	37	32
	S1	40	42	37	33	40	42	37	33
	S2	42	44	40	36	42	44	40	36
	S3	39	41	36	32	39	41	36	32
Project Maximum Operations	F1	39	39	39	39	41	41	41	41
	F2	41	41	41	41	44	44	44	44
	F3	31	31	31	31	33	33	33	33
	S1	43	43	43	43	45	45	45	45
	S2	40	40	40	40	42	42	42	42
	S3	39	39	39	39	41	41	41	41
Total Noise	F1	51	53	44	41	52	53	45	42
	F2	46	48	44	43	47	48	45	44
	F3	41	43	38	35	42	43	38	36
	S1	44	45	44	43	46	47	45	45
	S2	44	45	43	42	45	46	44	43
	S3	42	43	41	40	43	44	43	42
Increase over Ambient	F1	0	0	2	5	0	0	2	6
	F2	2	1	3	6	3	2	5	8
	F3	0	0	1	2	1	0	2	3
	S1	5	3	7	10	6	5	9	12
	S2	2	1	3	5	3	2	5	7
	S3	3	2	5	8	4	3	6	10

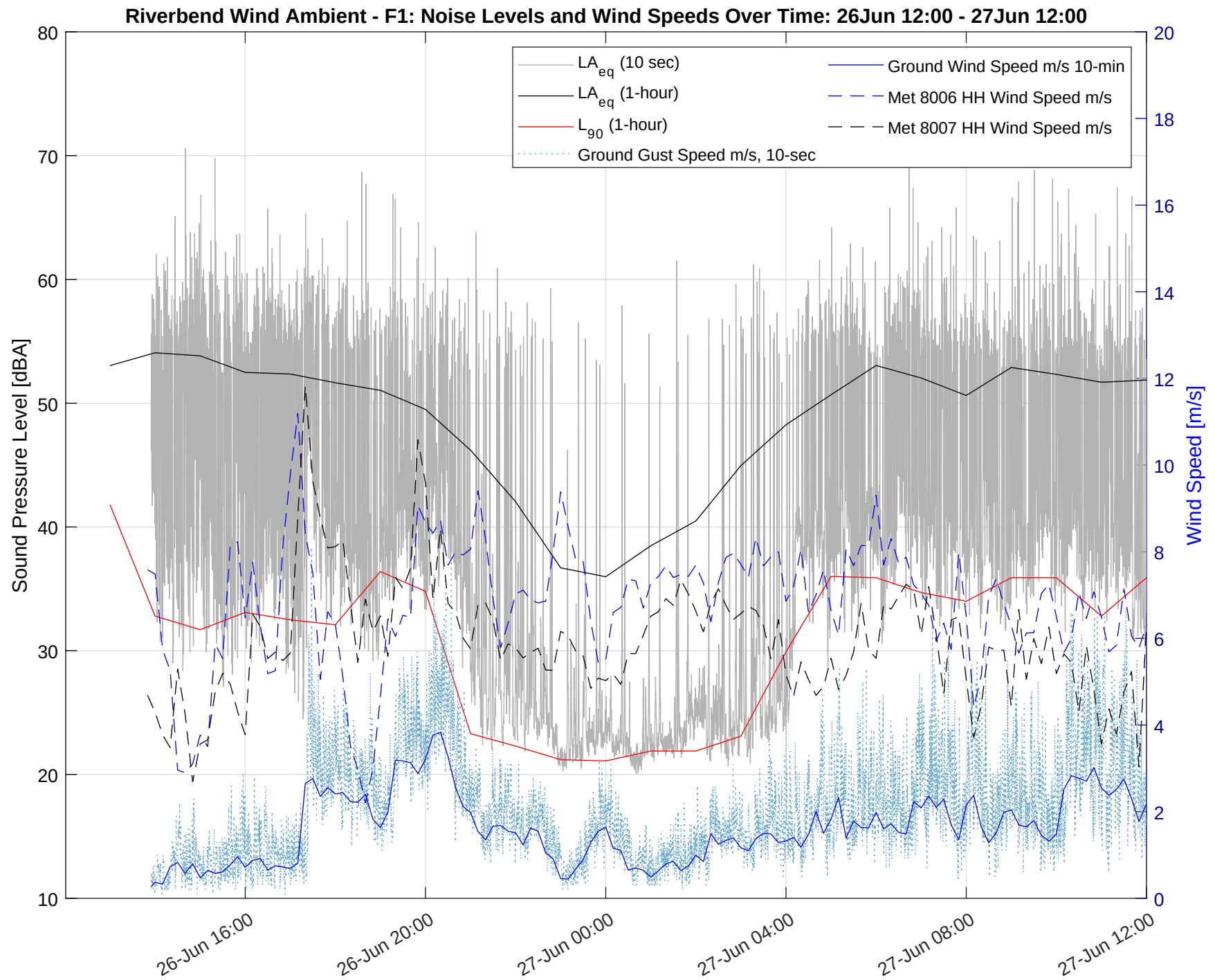
*Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility*

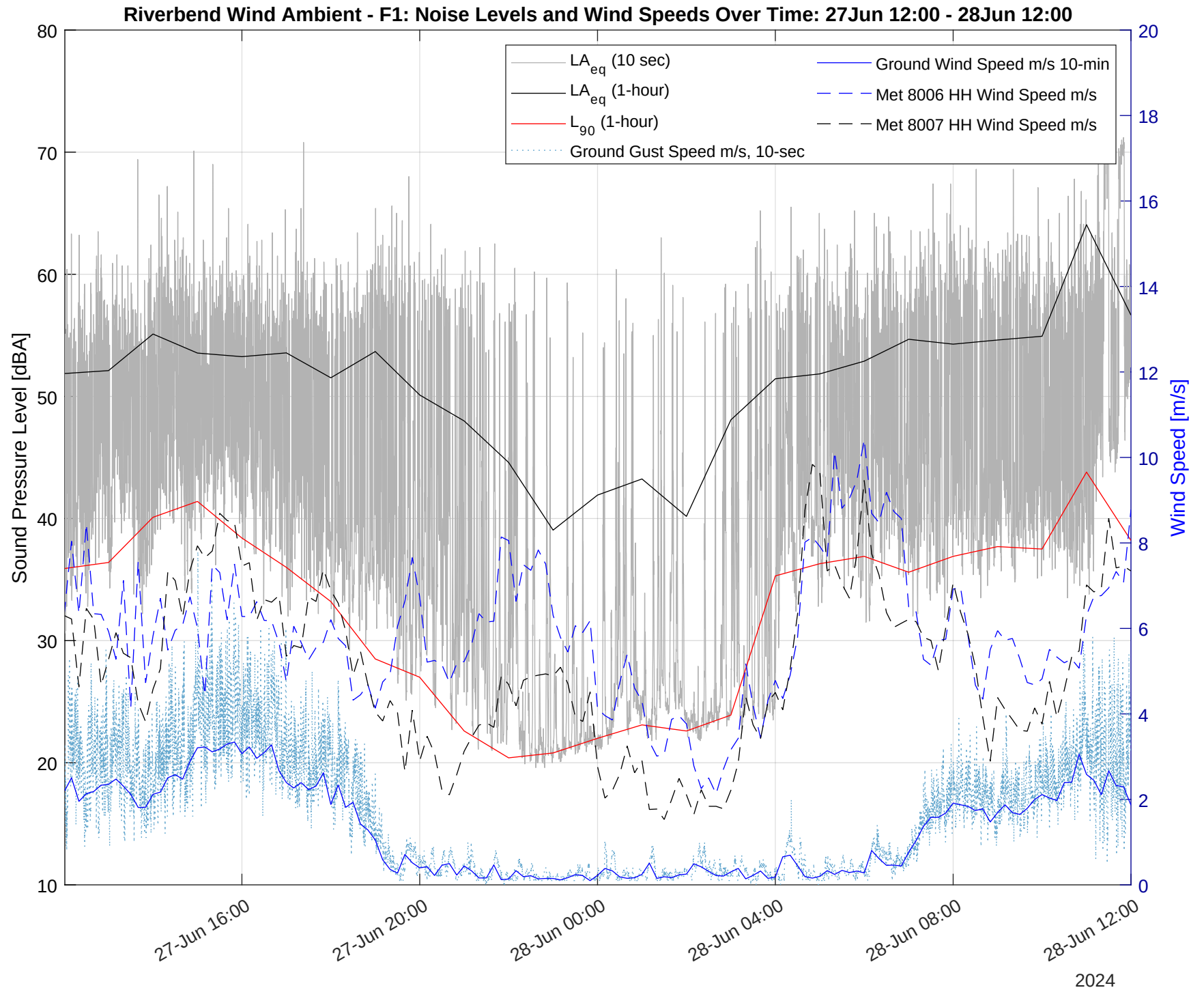
Noise Contribution	Site	Vestas V162-6.8MW STE				Vestas V162-7.2MW STE			
		L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)	L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)
Ambient Noise Levels	F1	51	53	42	36	51	53	42	36
	F2	44	46	41	37	44	46	41	37
	F3	41	43	37	32	41	43	37	32
	S1	40	42	37	33	40	42	37	33
	S2	42	44	40	36	42	44	40	36
	S3	39	41	36	32	39	41	36	32
Project Maximum Operations	F1	38	38	38	38	40	40	40	40
	F2	41	41	41	41	42	42	42	42
	F3	31	31	31	31	32	32	32	32
	S1	42	42	42	42	43	43	43	43
	S2	39	39	39	39	41	41	41	41
	S3	39	39	39	39	40	40	40	40
Total Noise	F1	51	53	44	40	52	53	44	41
	F2	46	47	44	42	46	48	44	43
	F3	41	43	38	35	41	43	38	35
	S1	44	45	43	42	45	46	44	43
	S2	44	45	42	41	45	46	43	42
	S3	42	43	41	40	42	43	41	41
Increase over Ambient	F1	0	0	1	4	0	0	2	5
	F2	2	1	3	6	2	1	4	6
	F3	0	0	1	2	1	0	1	3
	S1	4	3	6	9	5	3	7	11
	S2	2	1	3	5	2	2	3	5
	S3	3	2	4	7	4	3	5	8

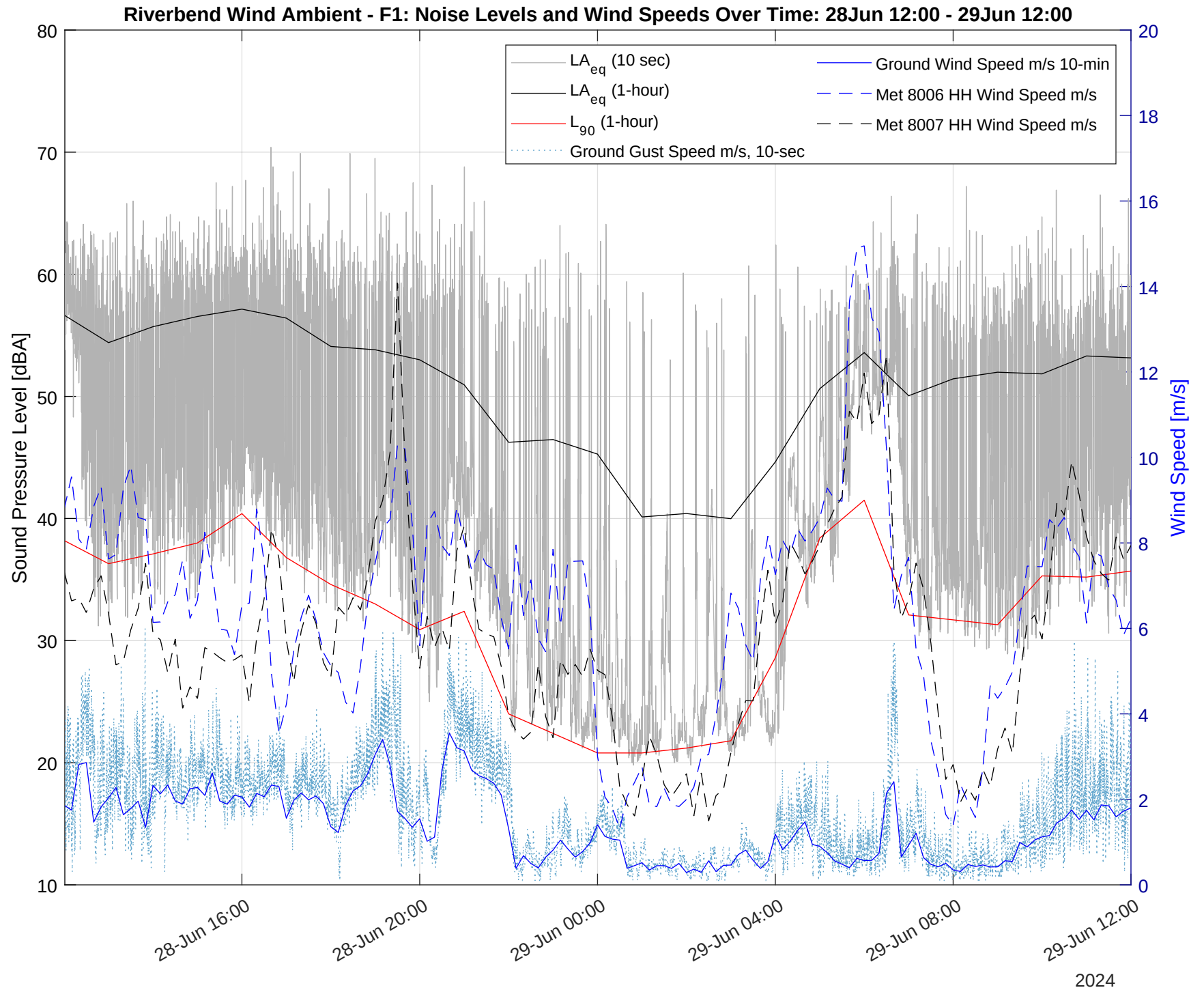
Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

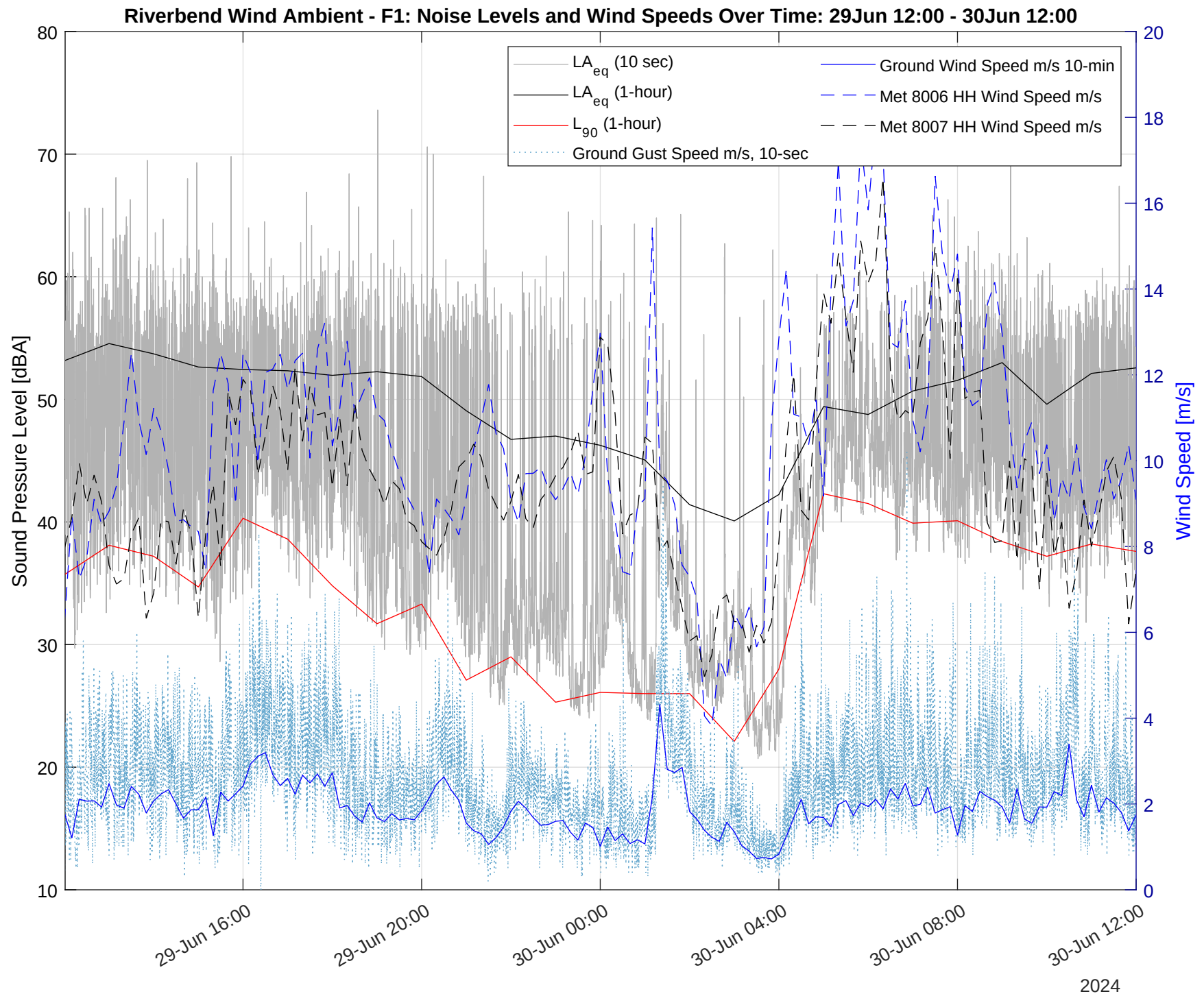
Noise Contribution	Site	Vestas V163-4.5MW STE			
		L _{eq} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)
Ambient Noise Levels	F1	51	53	42	36
	F2	44	46	41	37
	F3	41	43	37	32
	S1	40	42	37	33
	S2	42	44	40	36
	S3	39	41	36	32
Project Maximum Operations	F1	41	41	41	41
	F2	44	44	44	44
	F3	33	33	33	33
	S1	45	45	45	45
	S2	42	42	42	42
	S3	41	41	41	41
Total Noise	F1	52	53	45	42
	F2	47	48	45	44
	F3	42	43	38	36
	S1	46	47	45	45
	S2	45	46	44	43
	S3	43	44	43	42
Increase over Ambient	F1	0	0	3	6
	F2	3	2	5	8
	F3	1	0	2	4
	S1	6	4	9	12
	S2	3	2	4	7
	S3	4	3	6	10

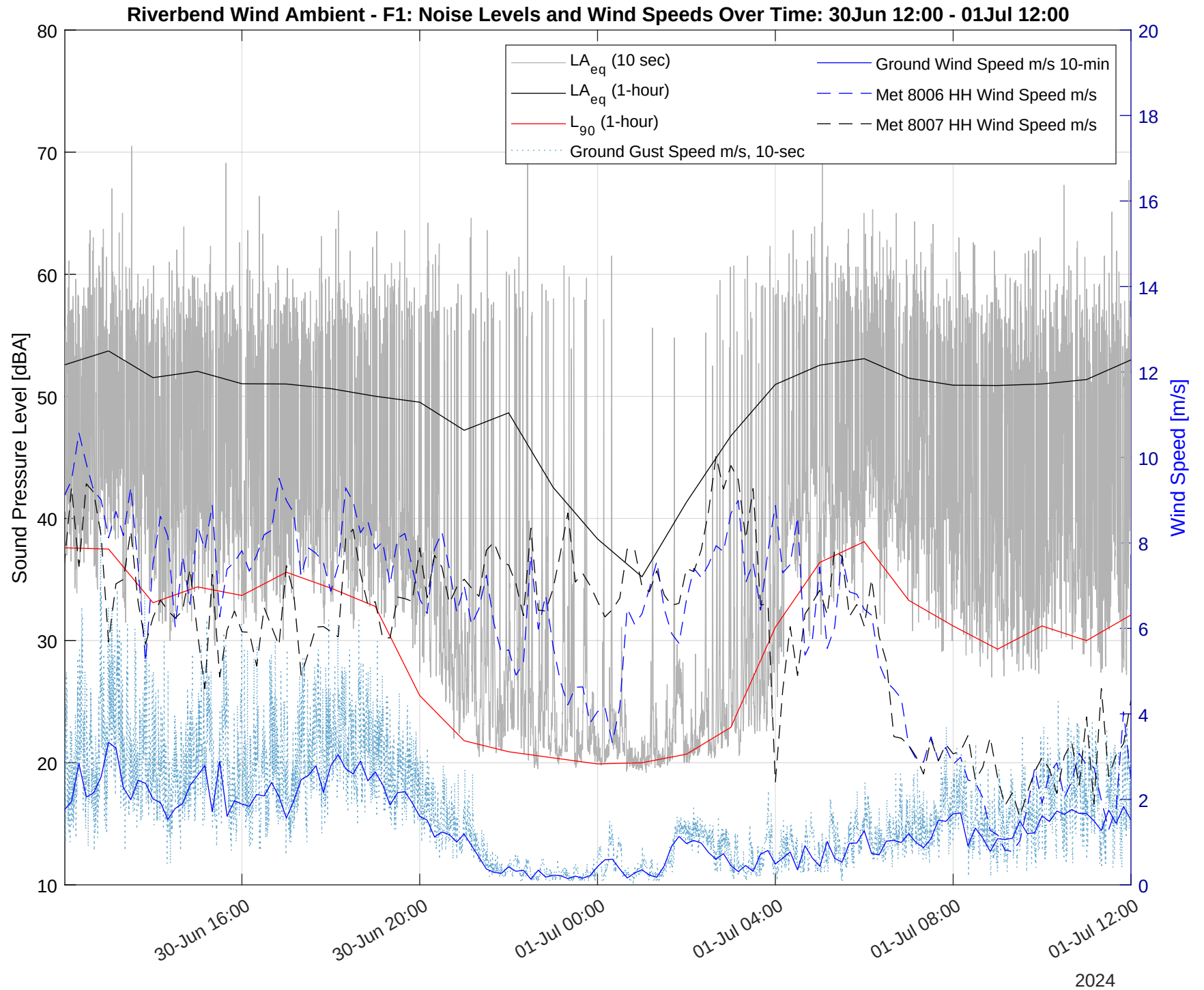
Time Plots of Measured Noise Levels and Meteorological Data

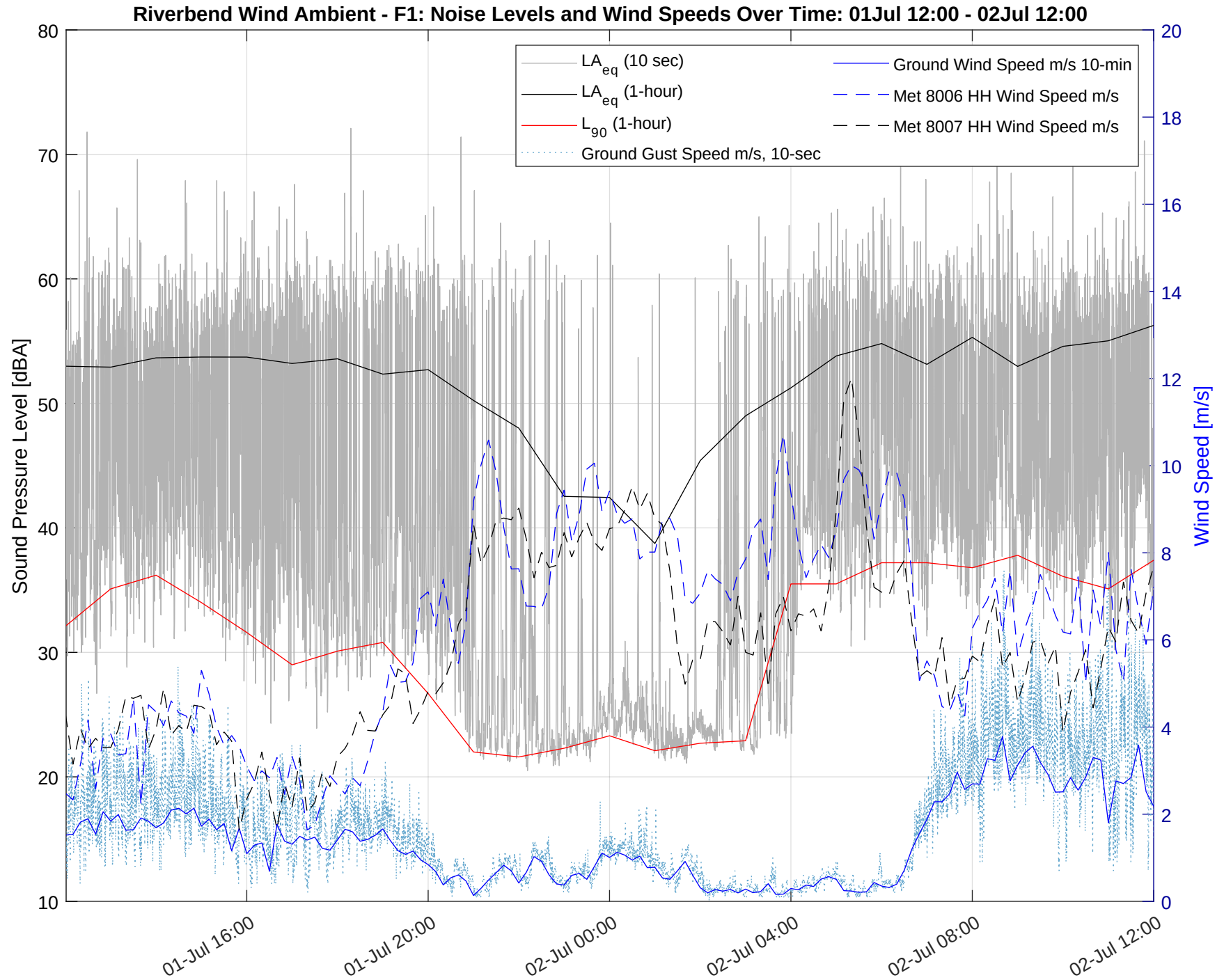


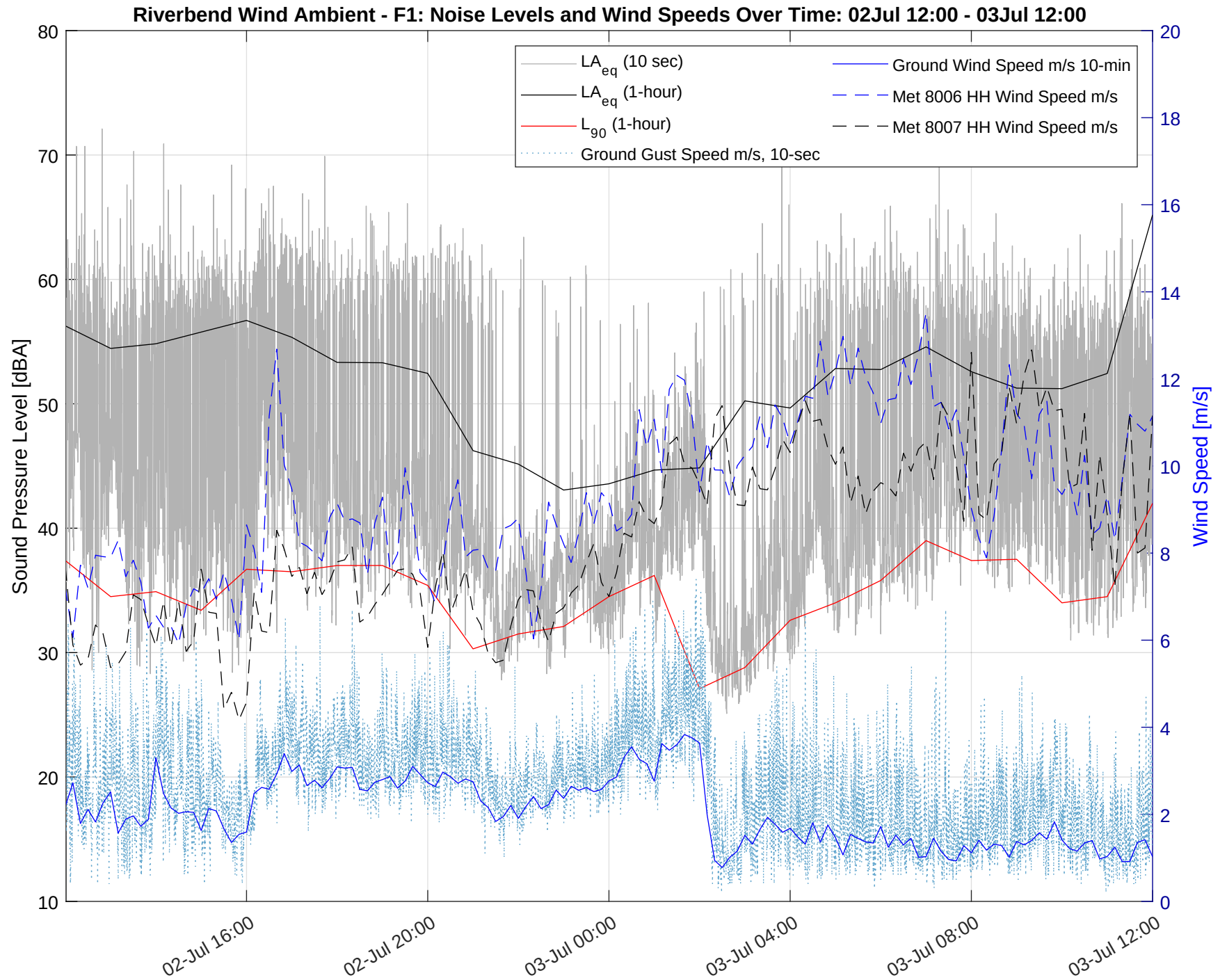


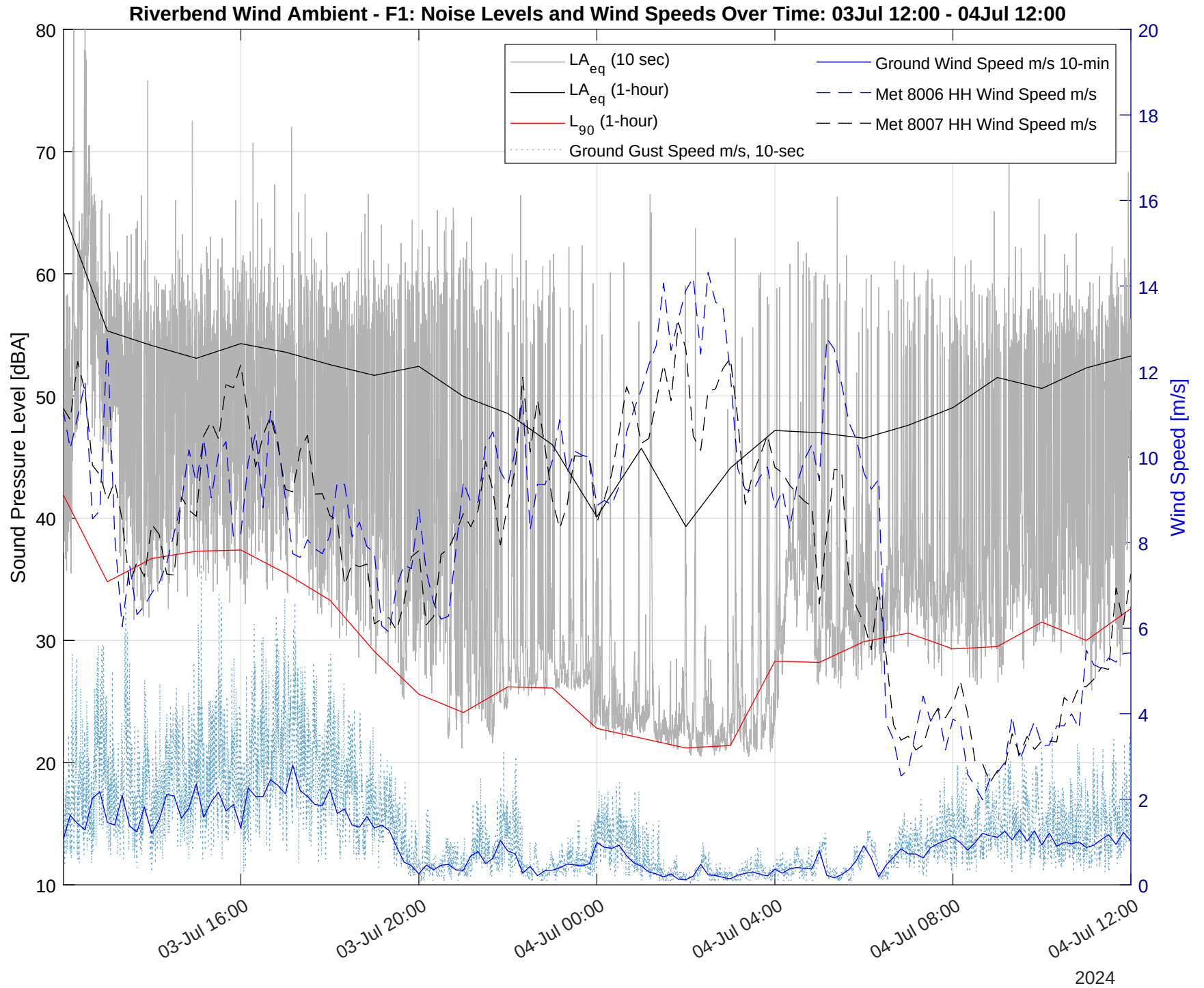


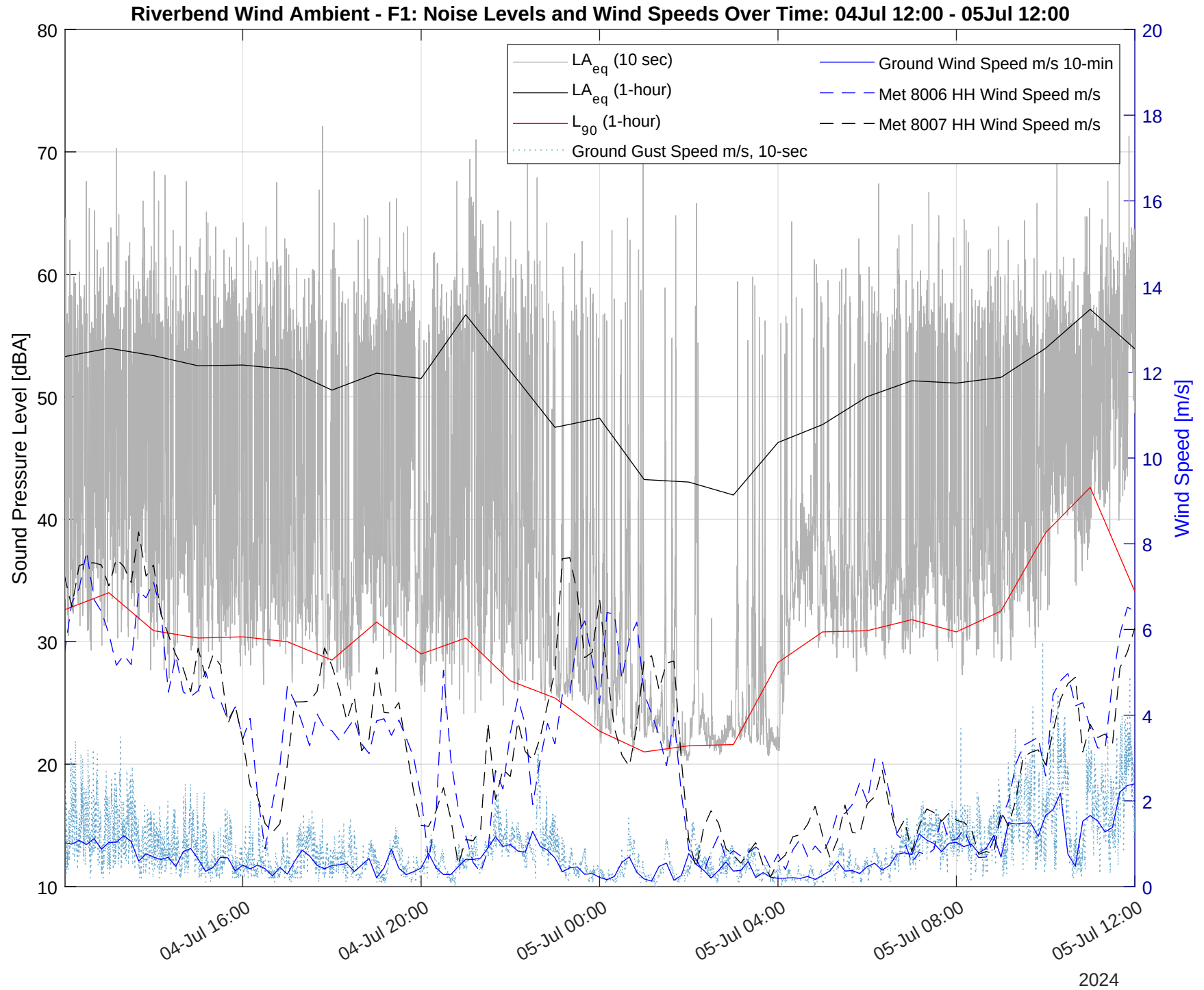


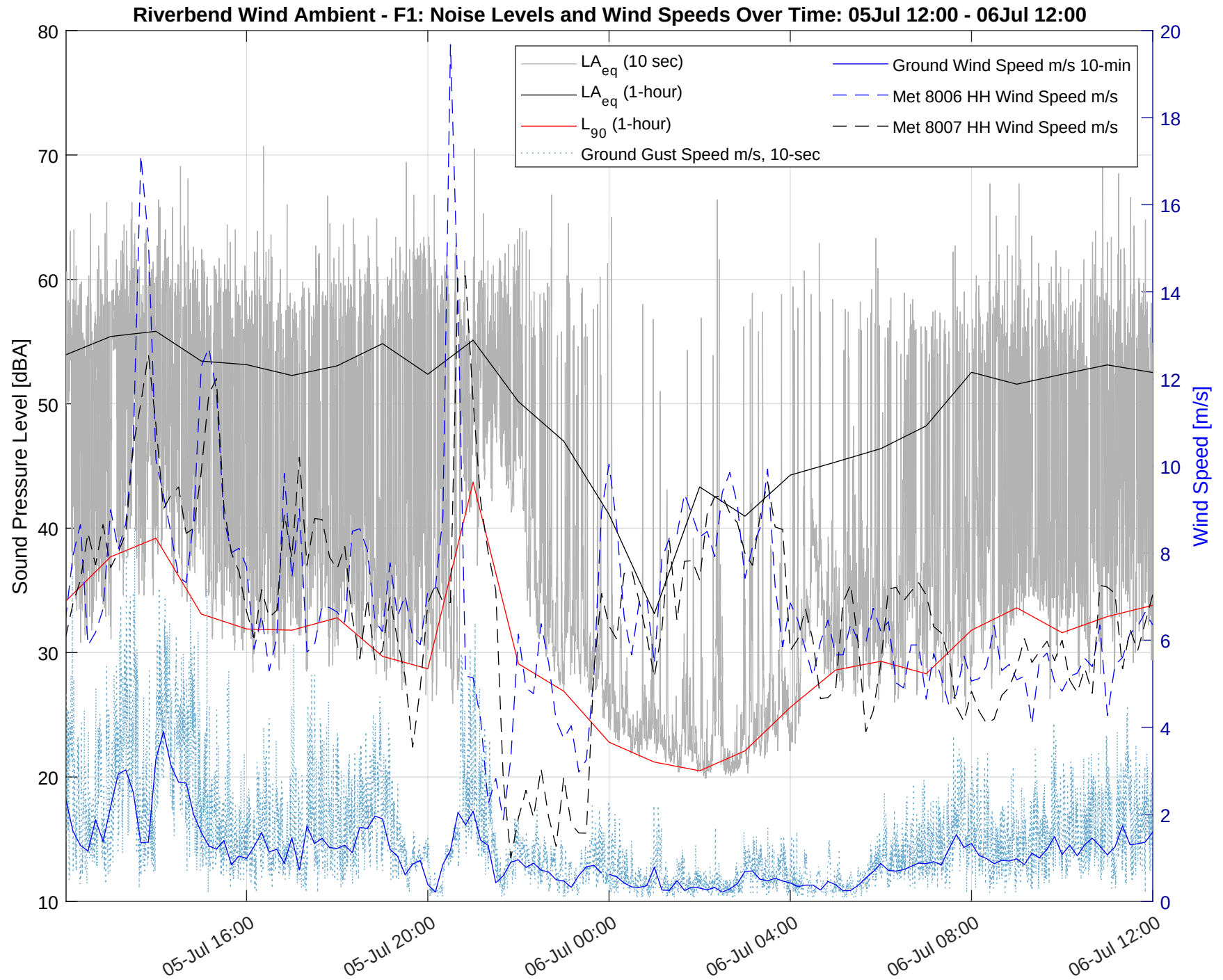


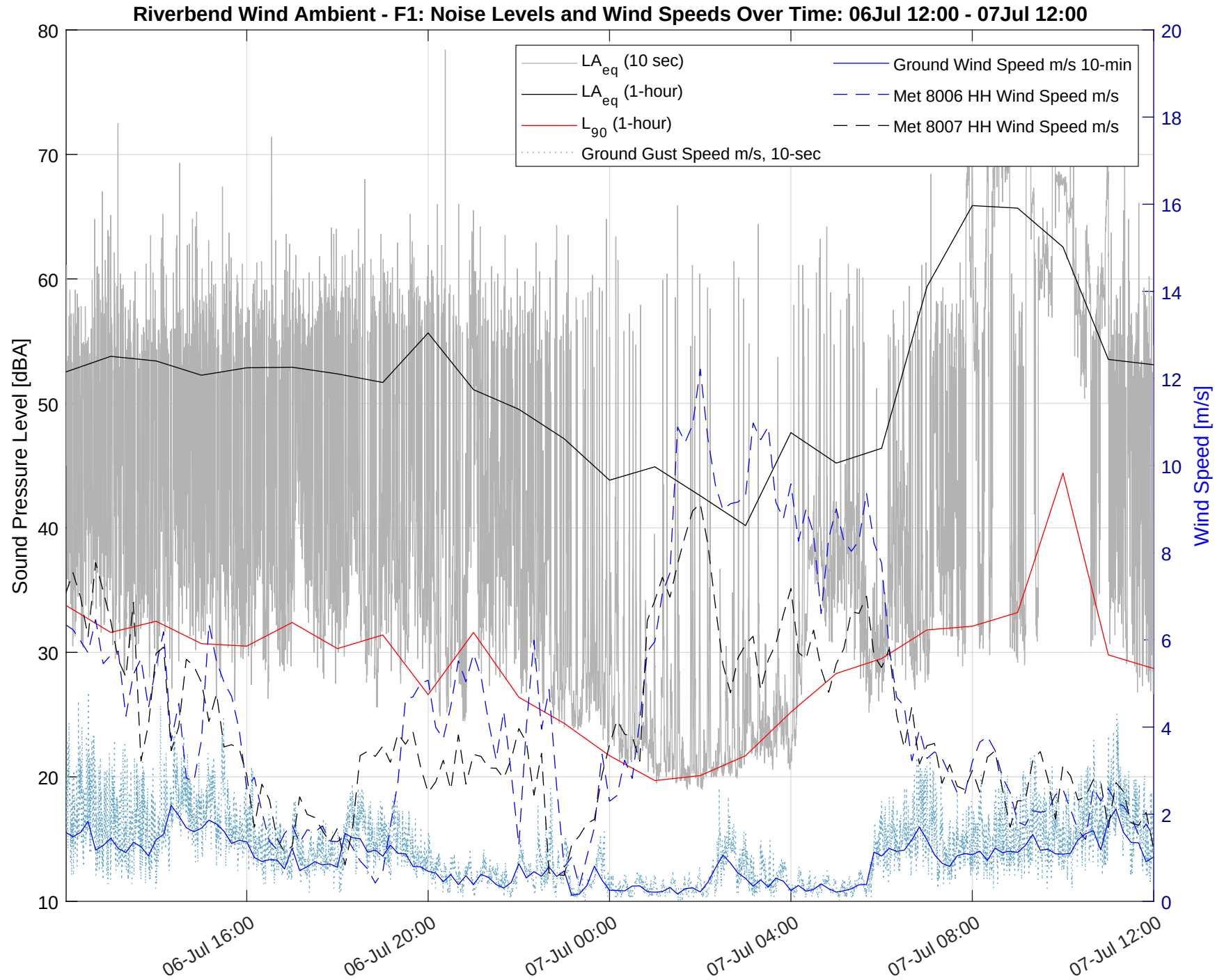


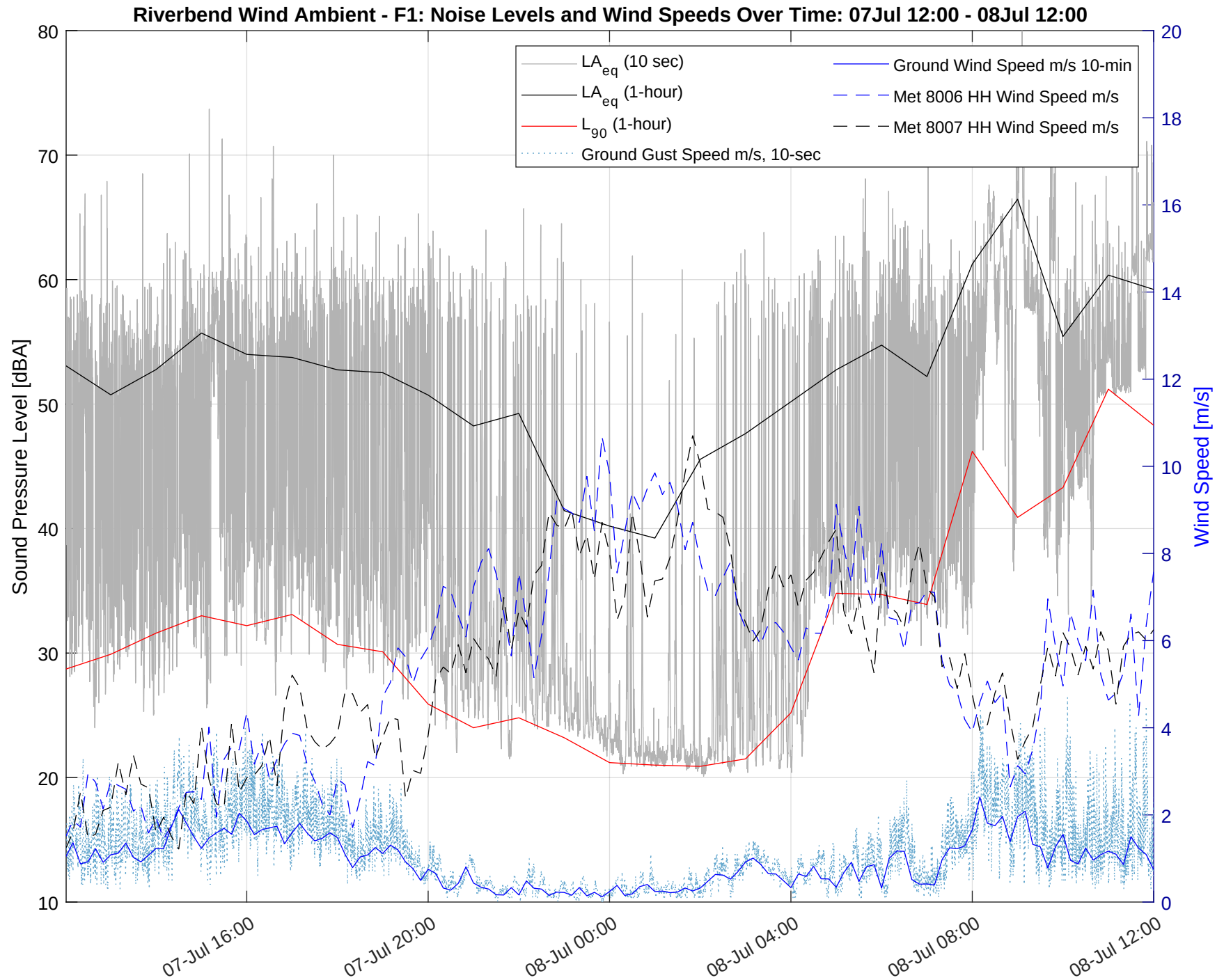


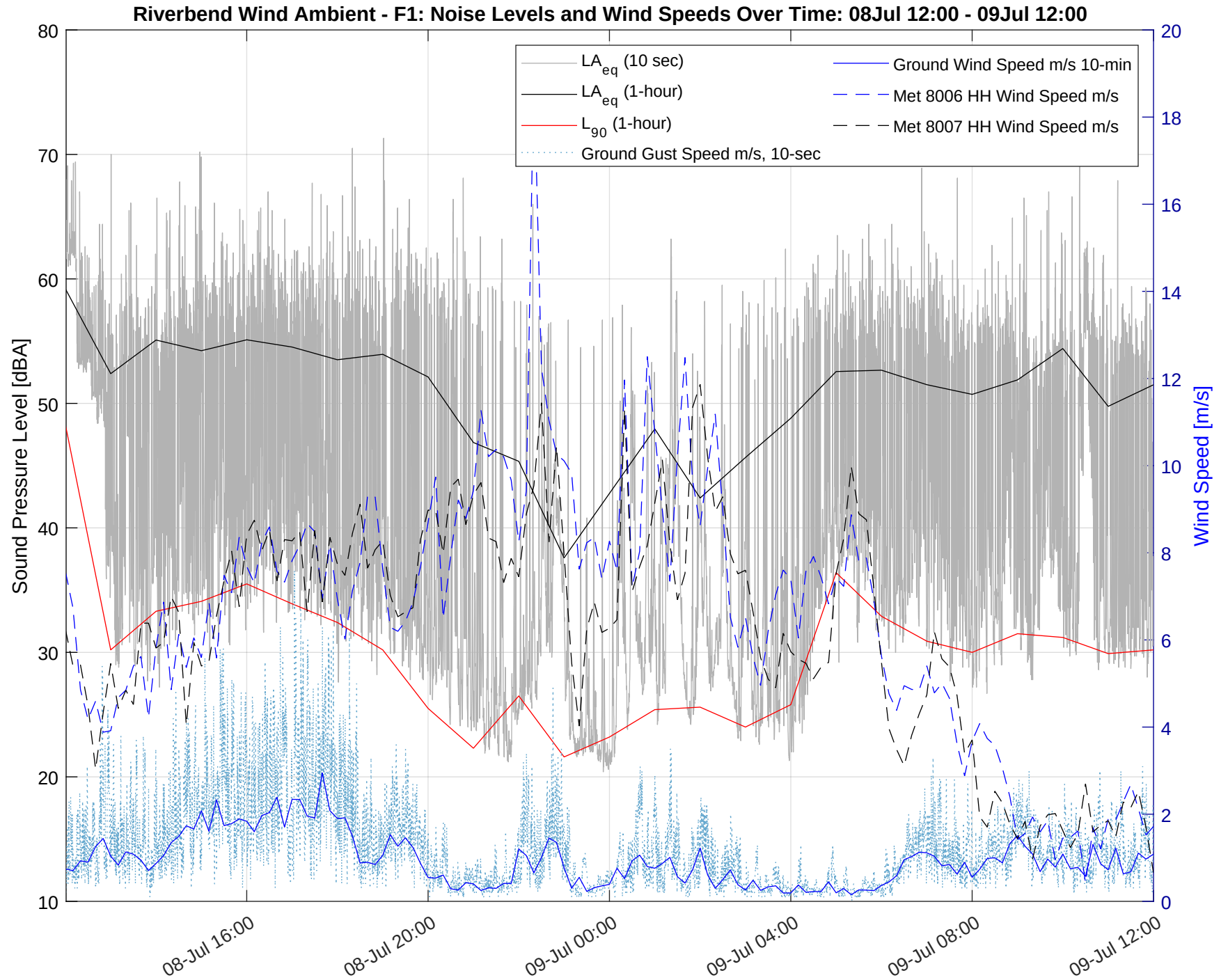


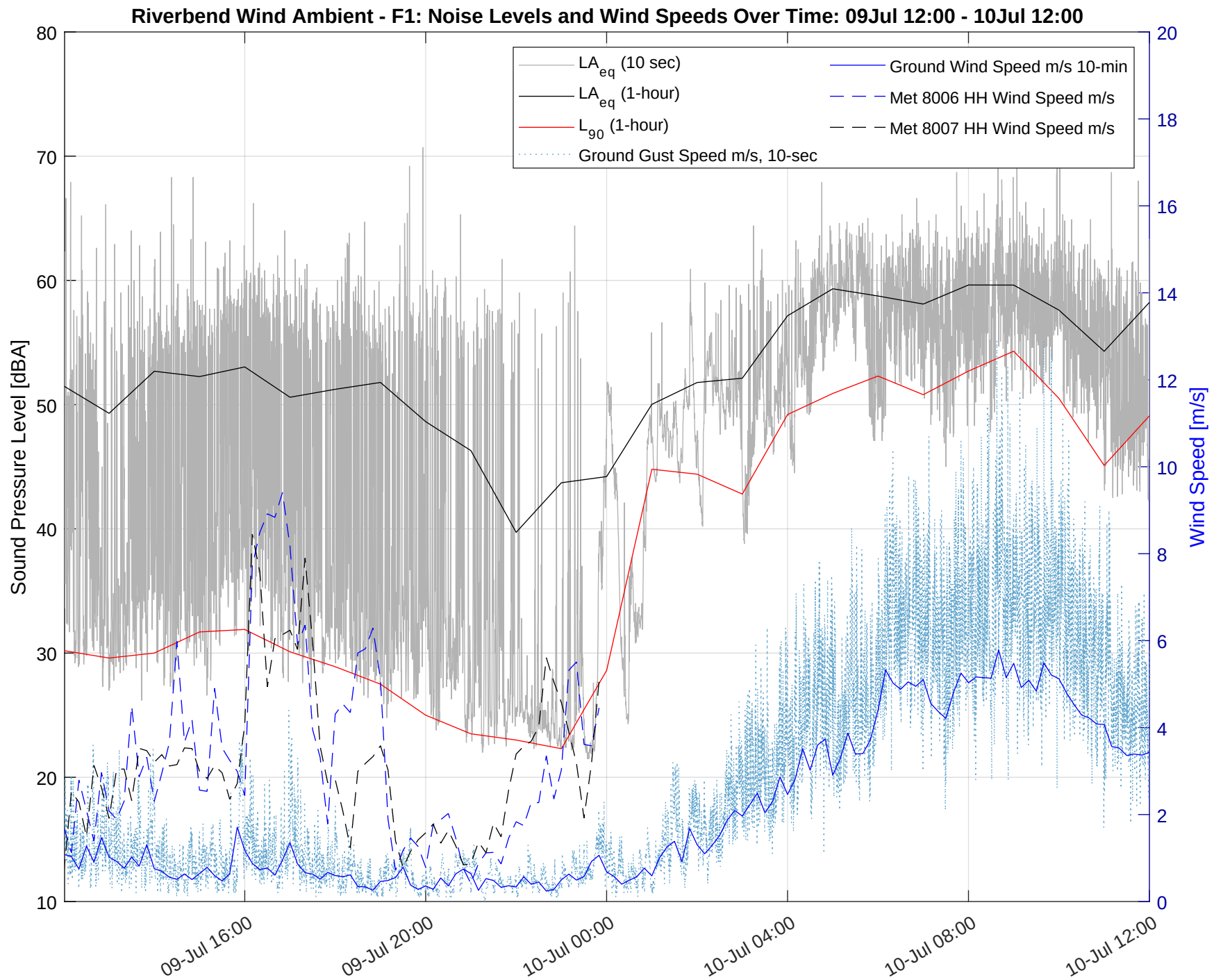


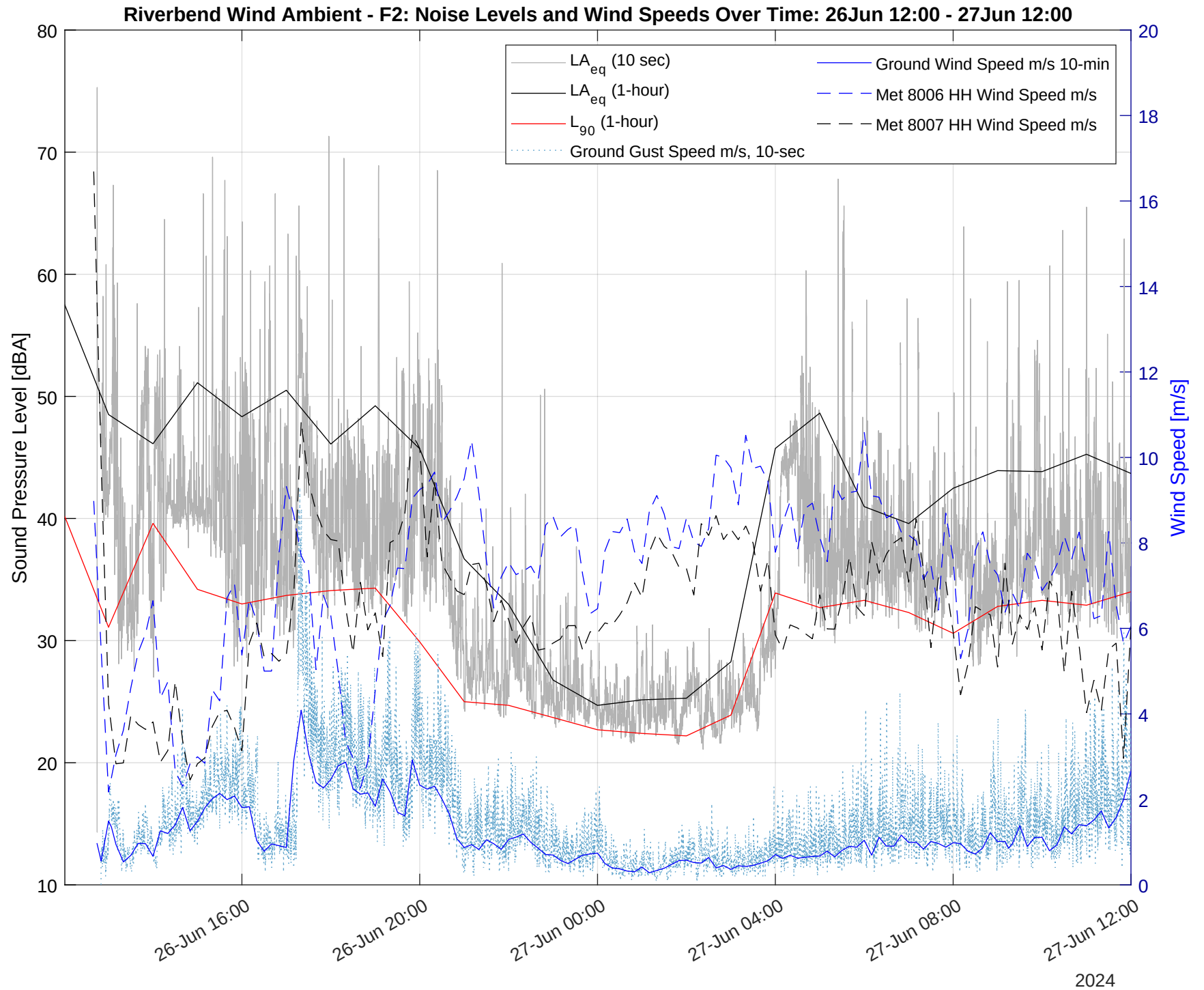


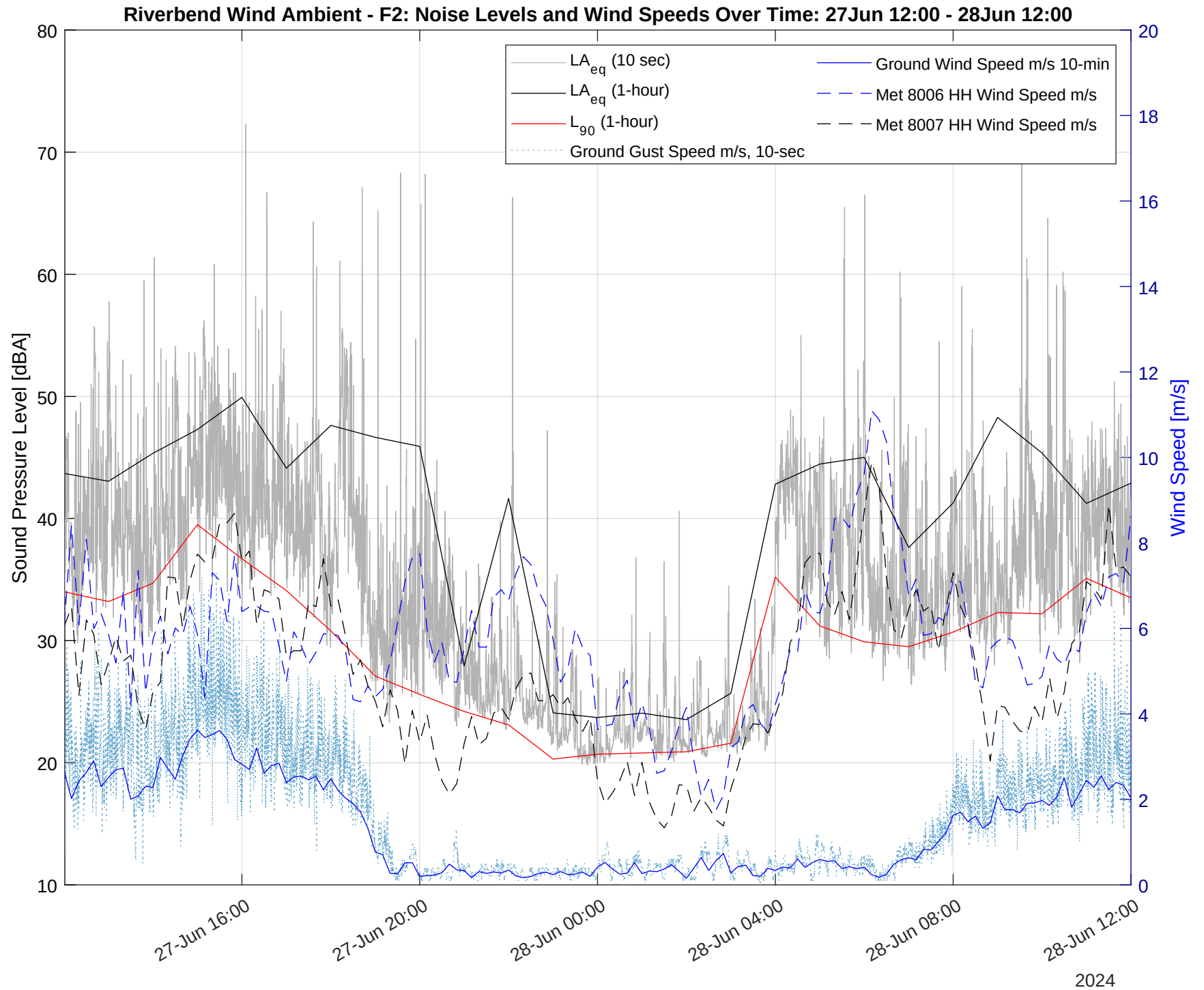


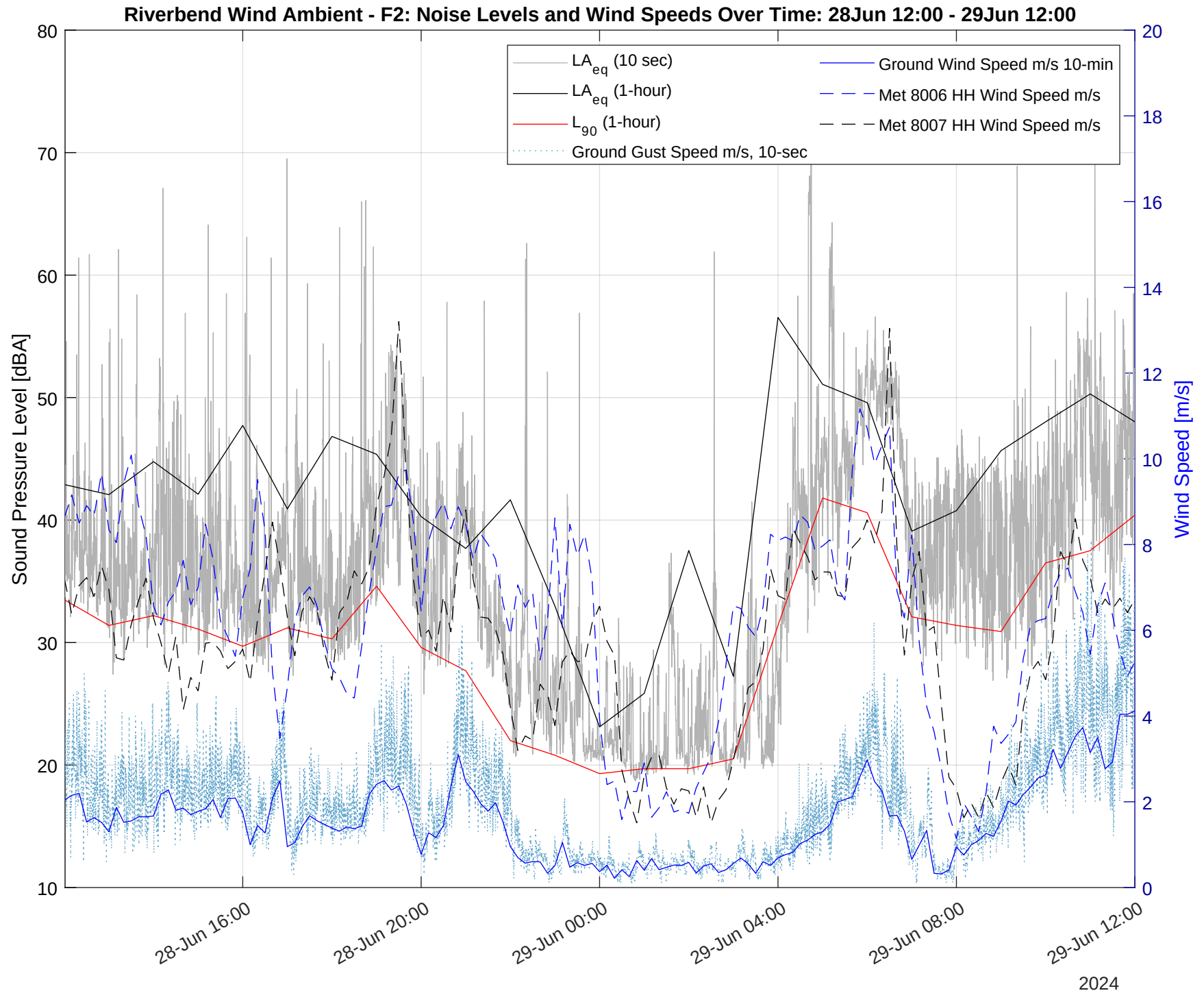


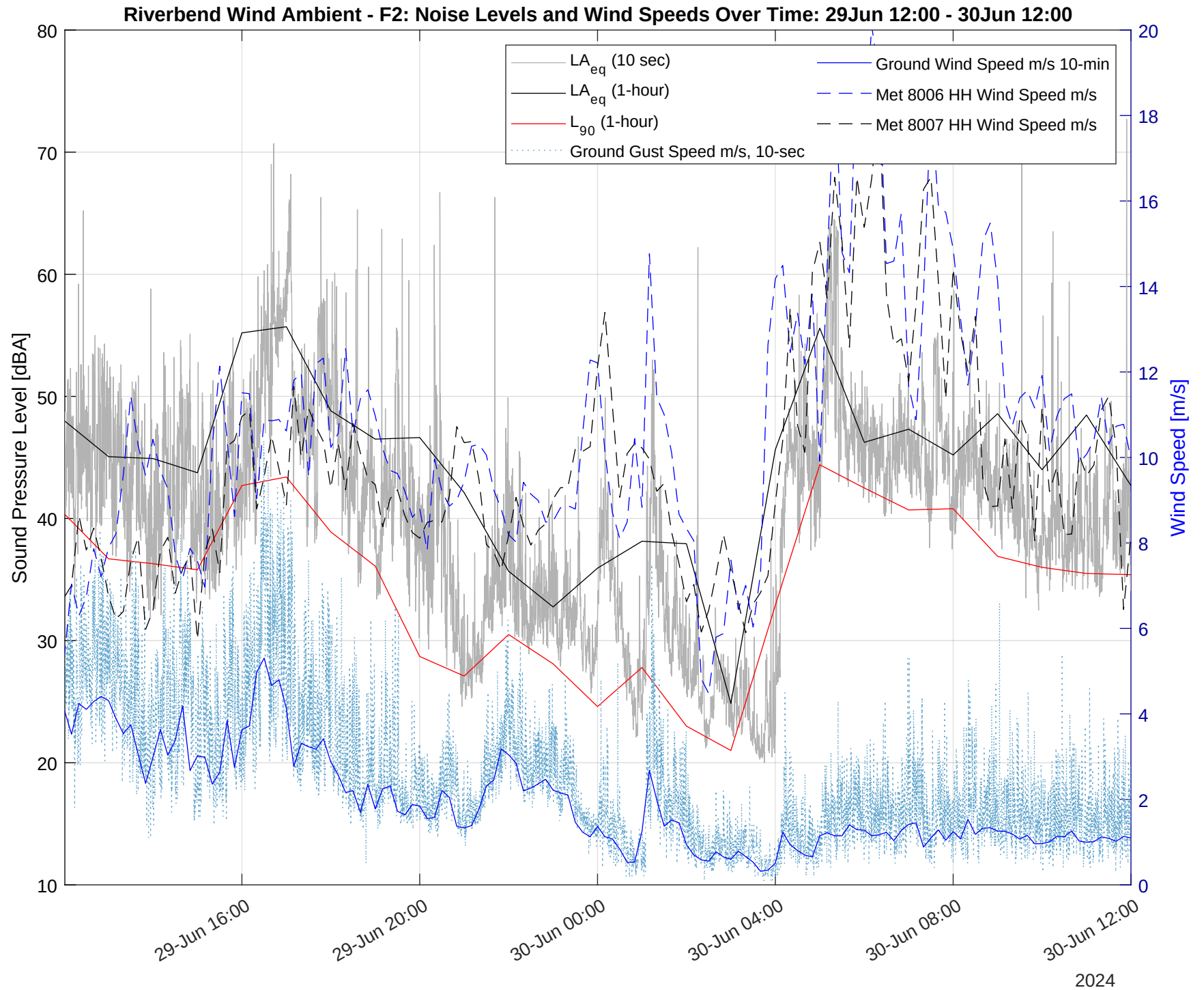


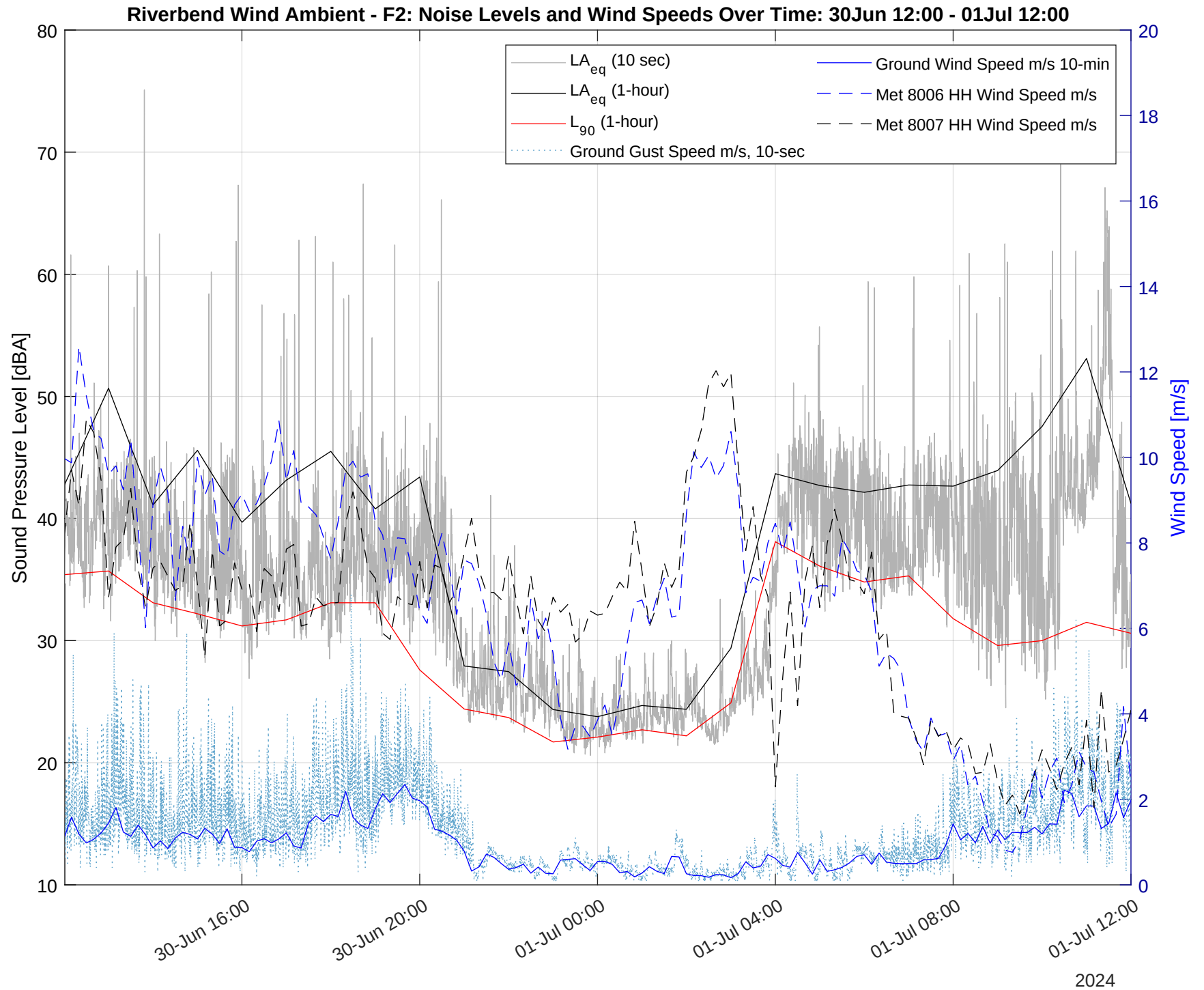


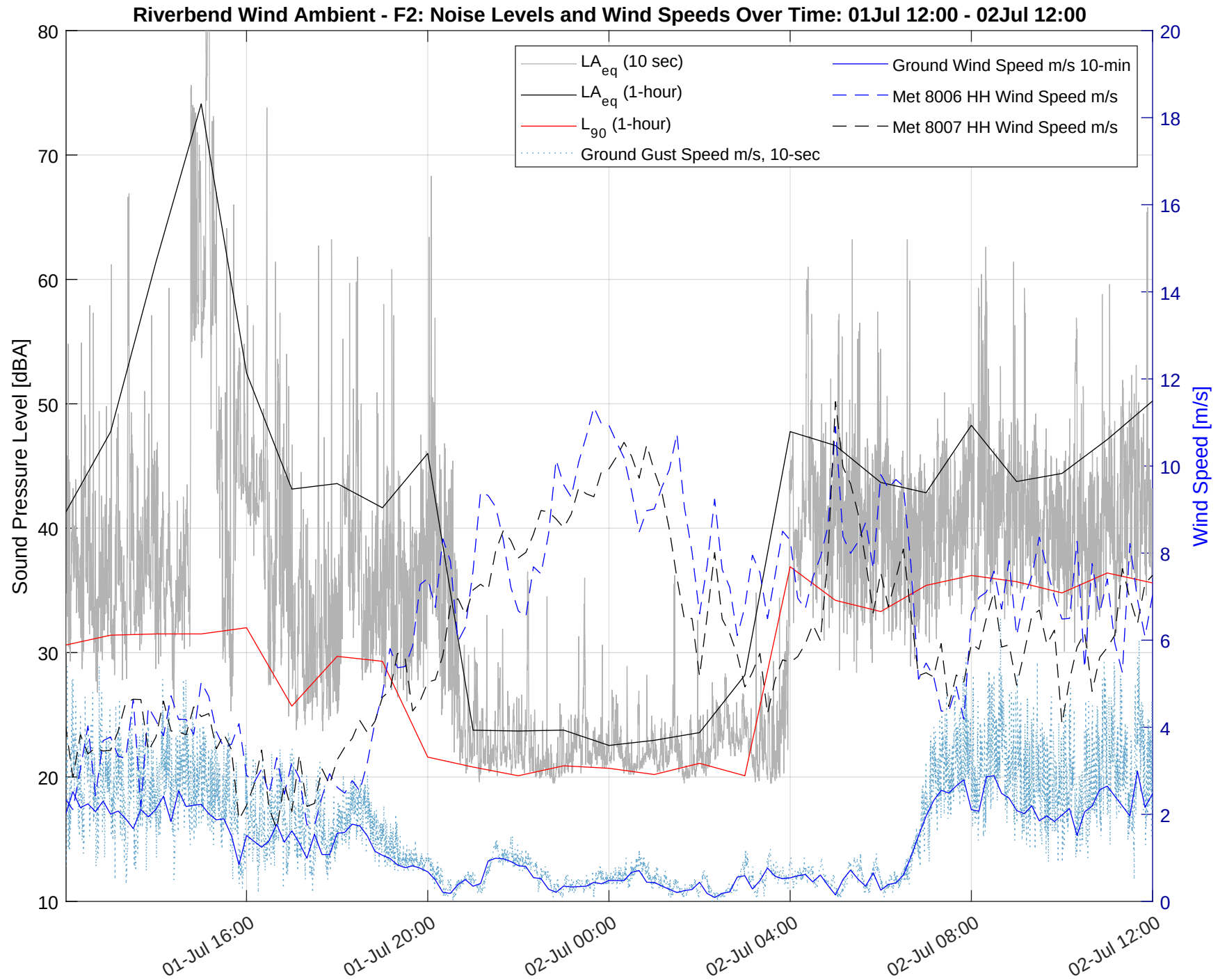


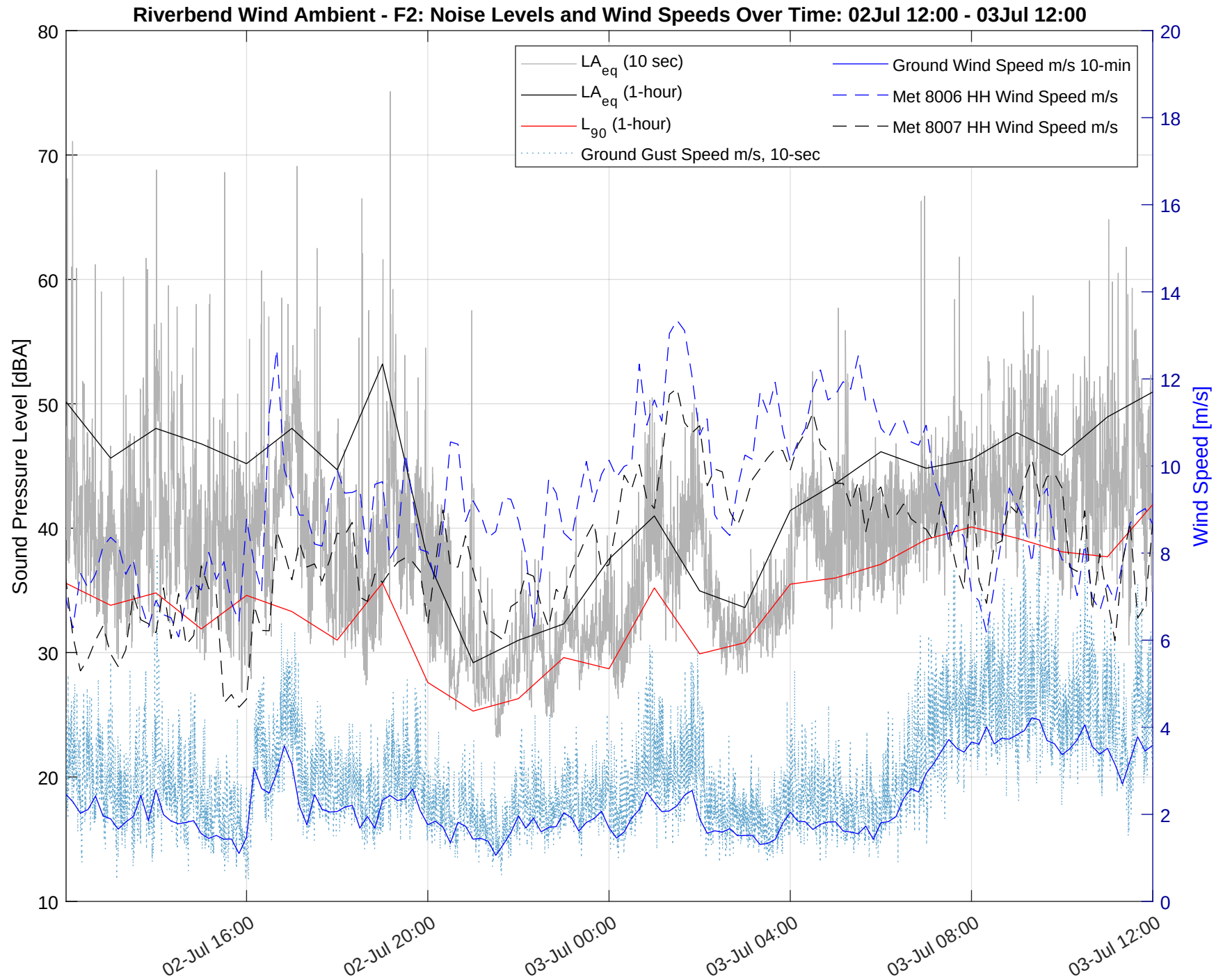


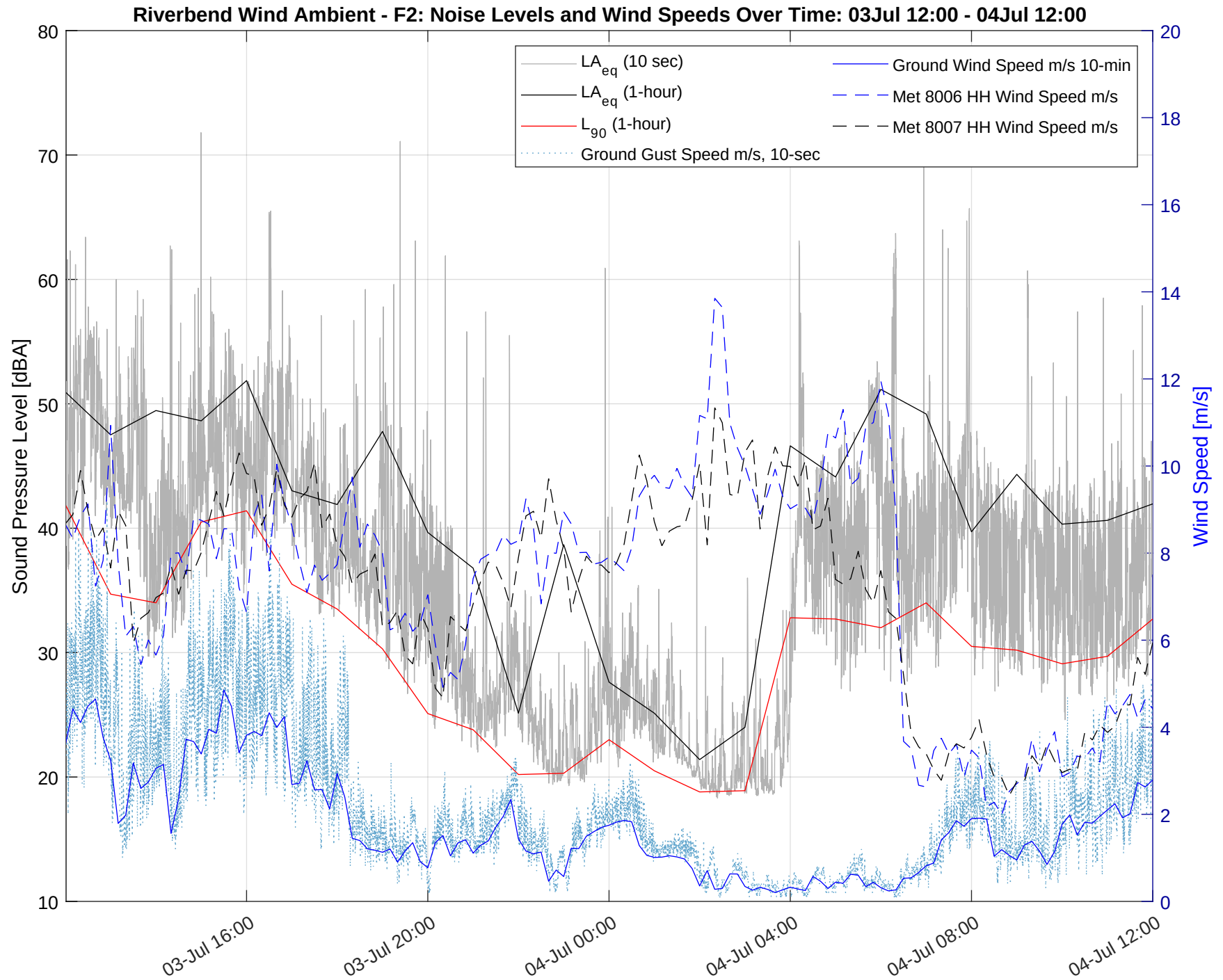


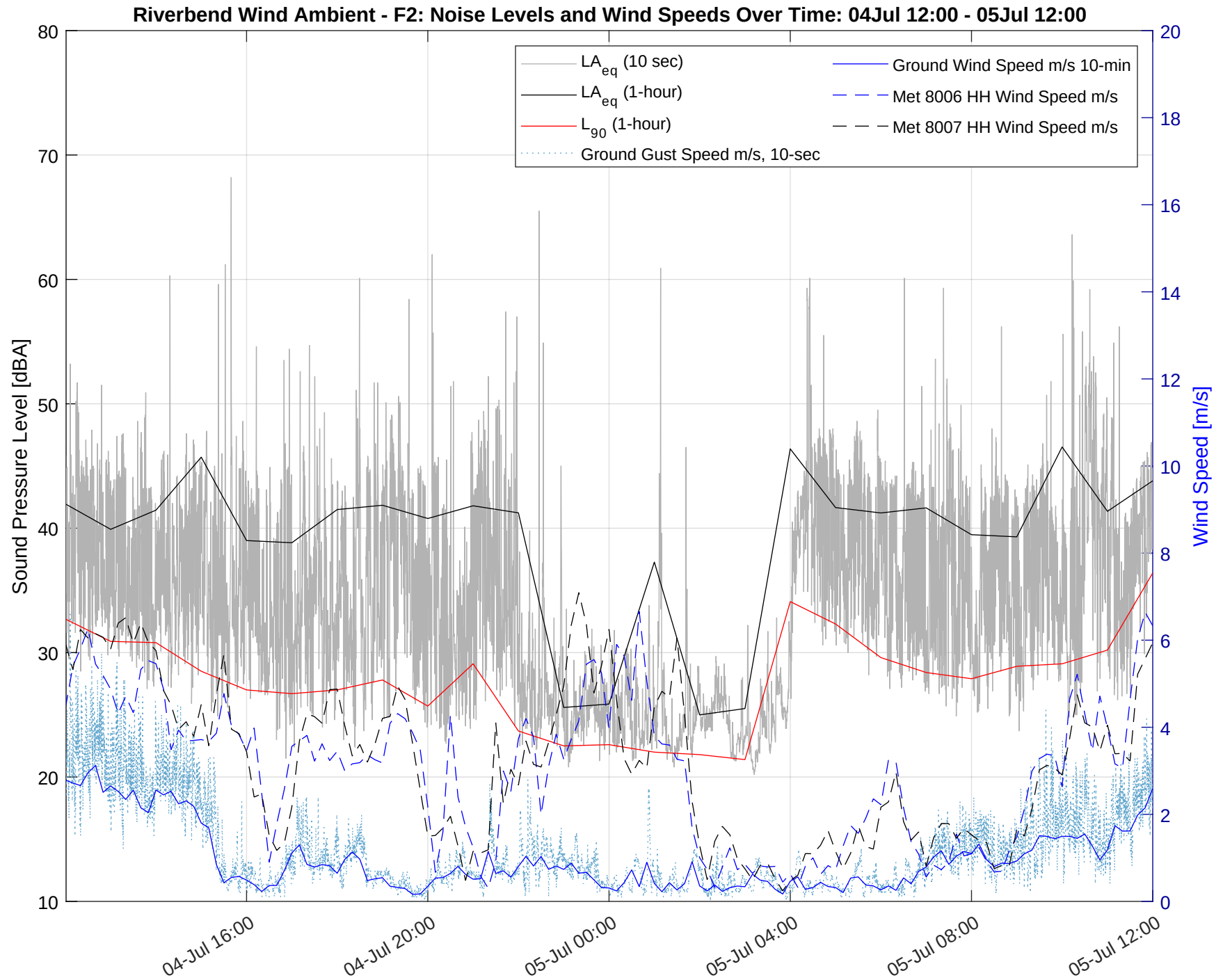


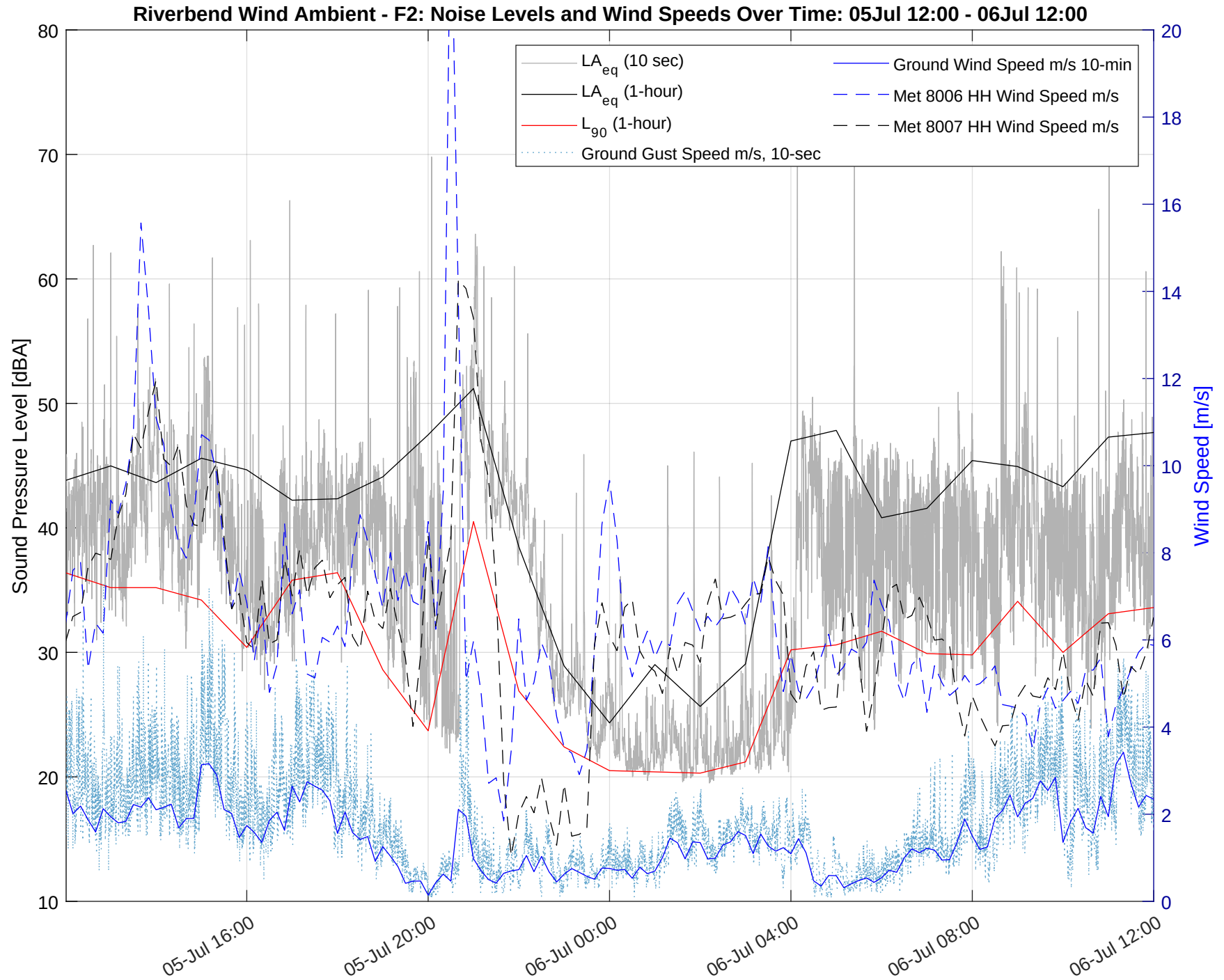


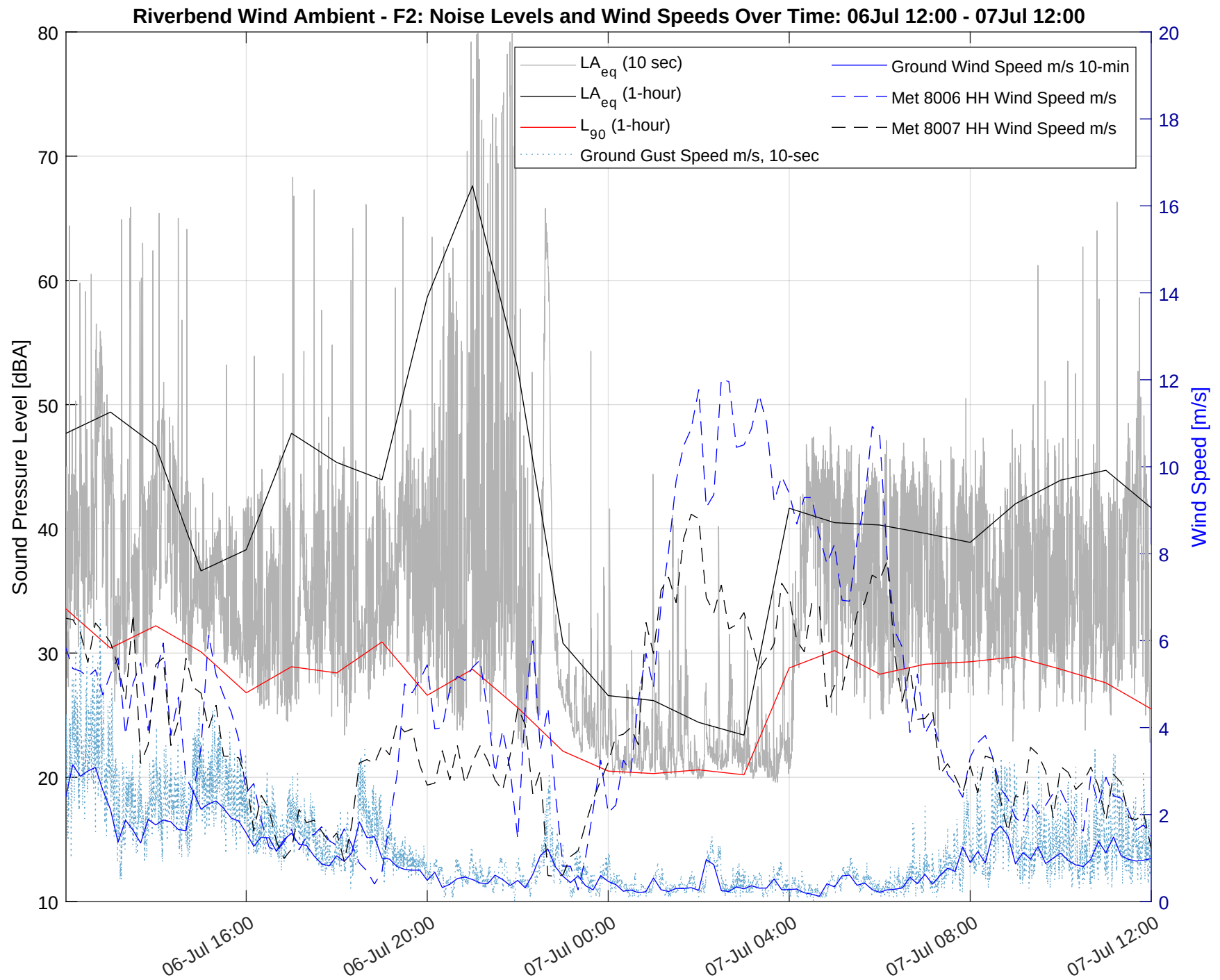


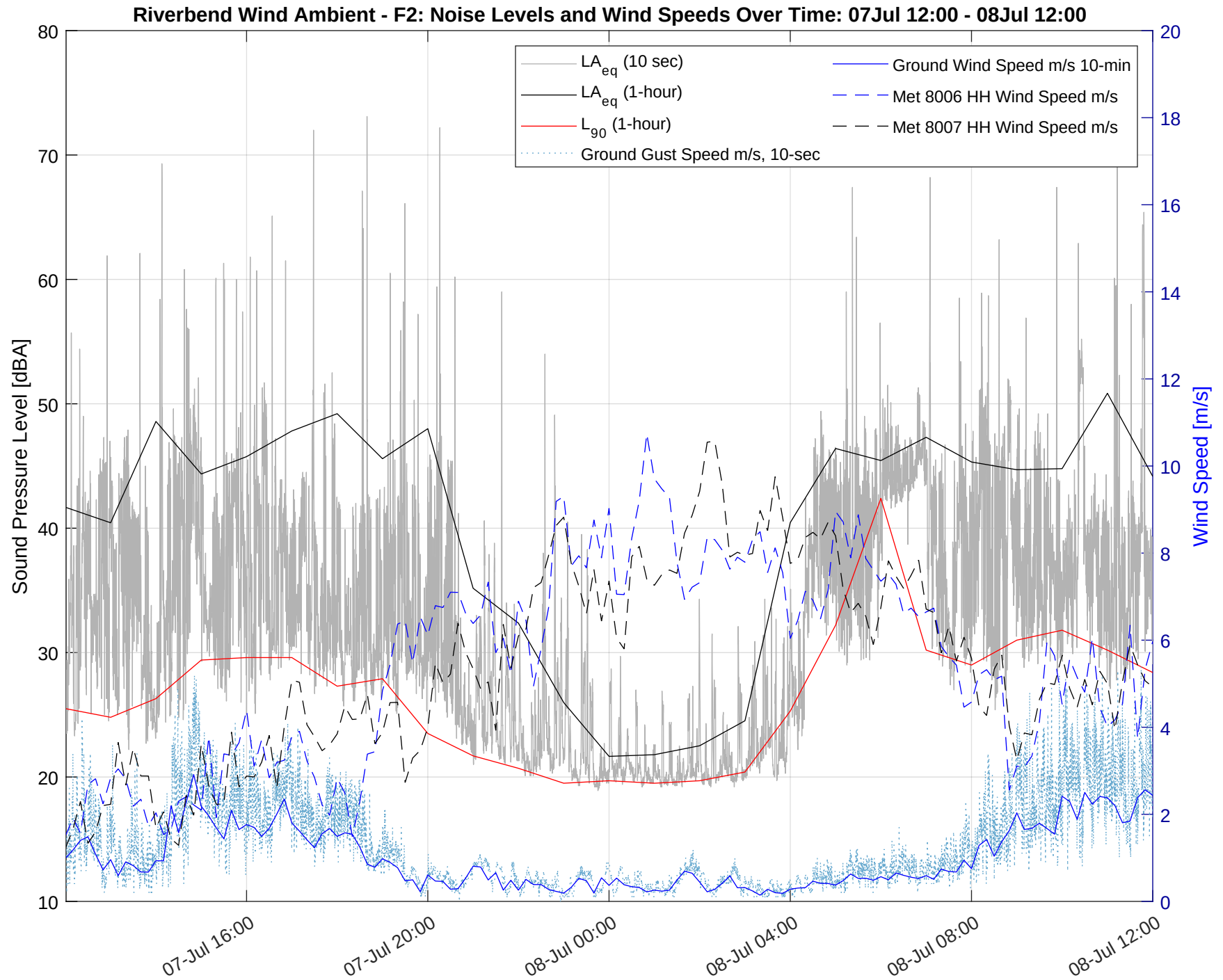


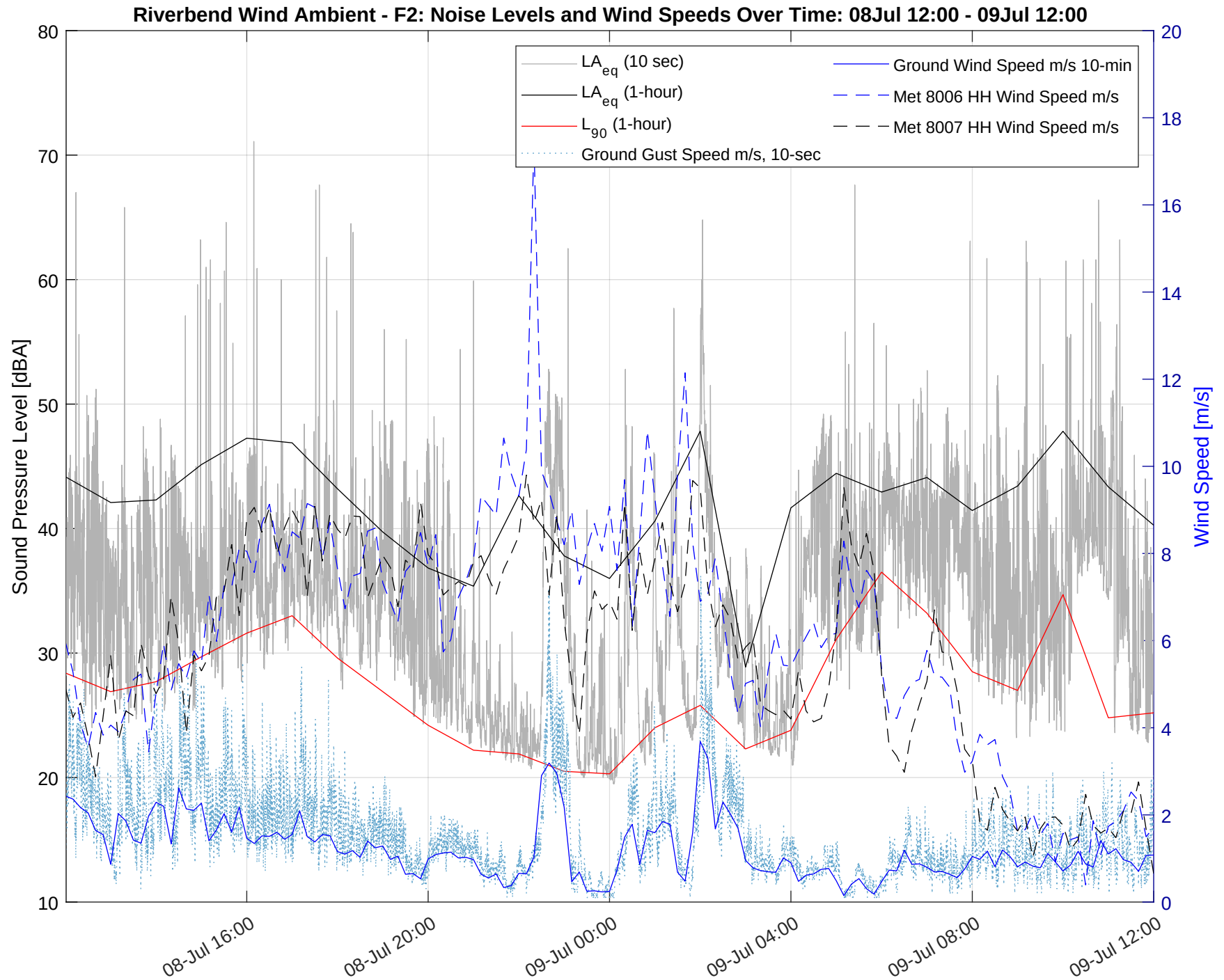


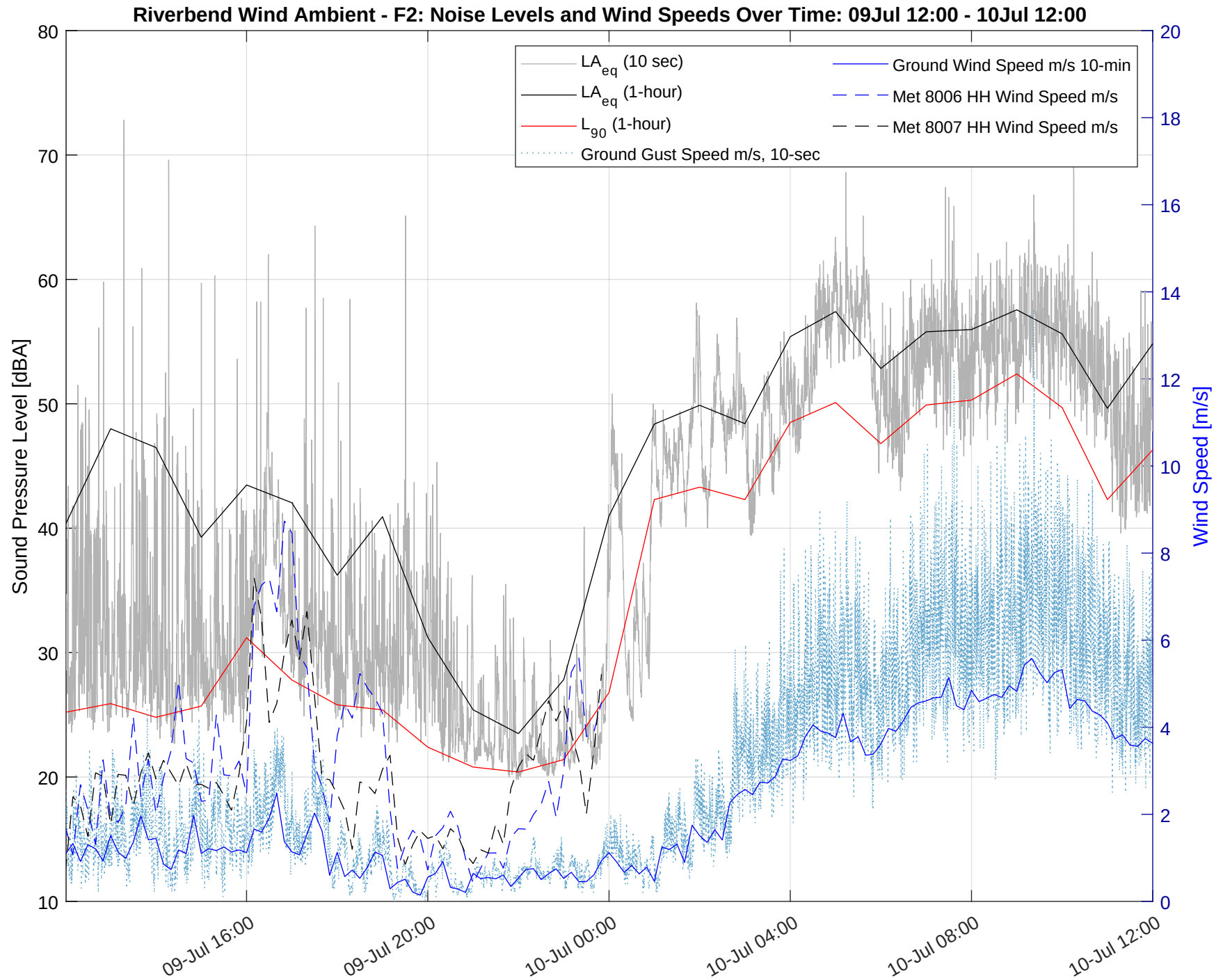


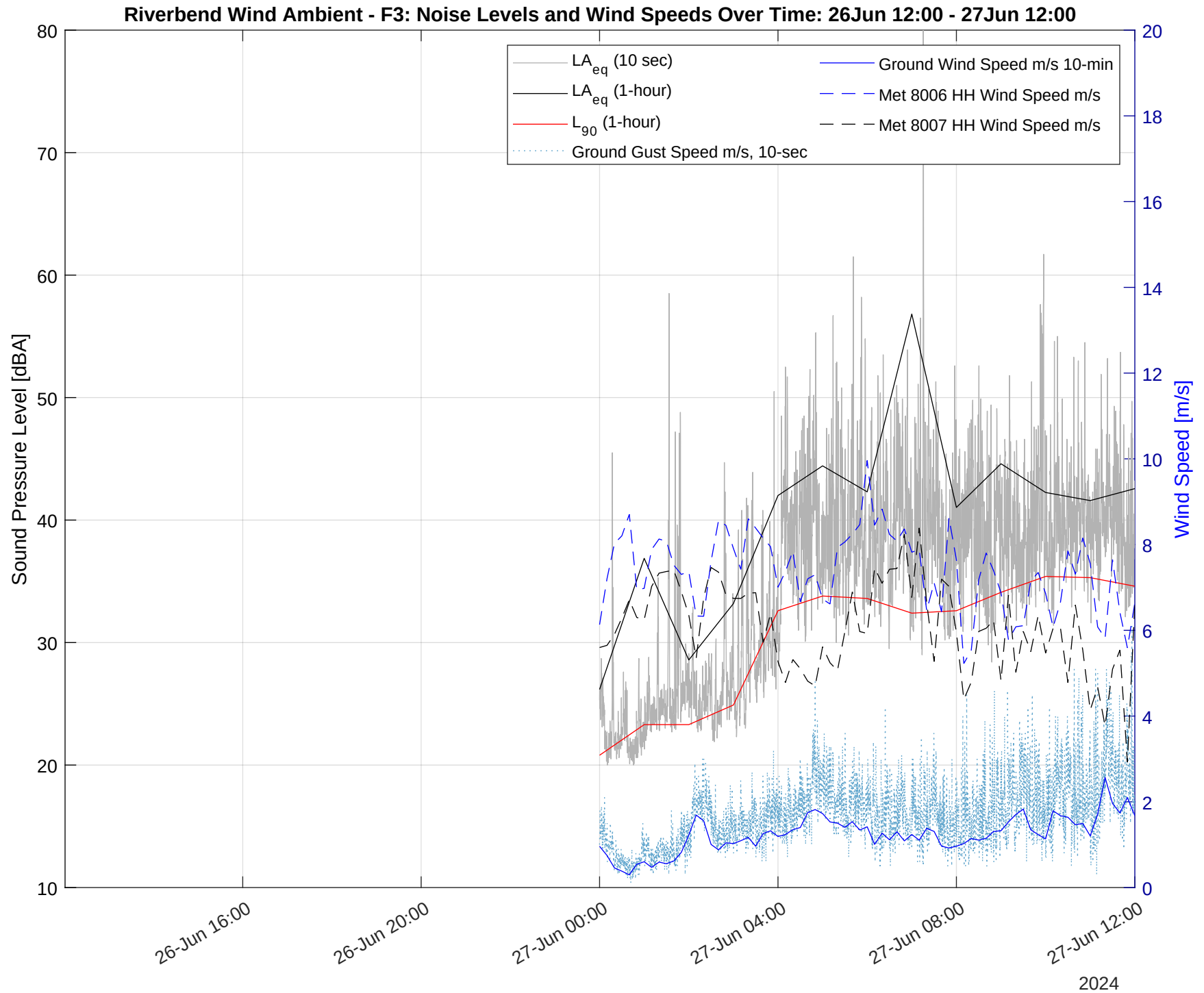


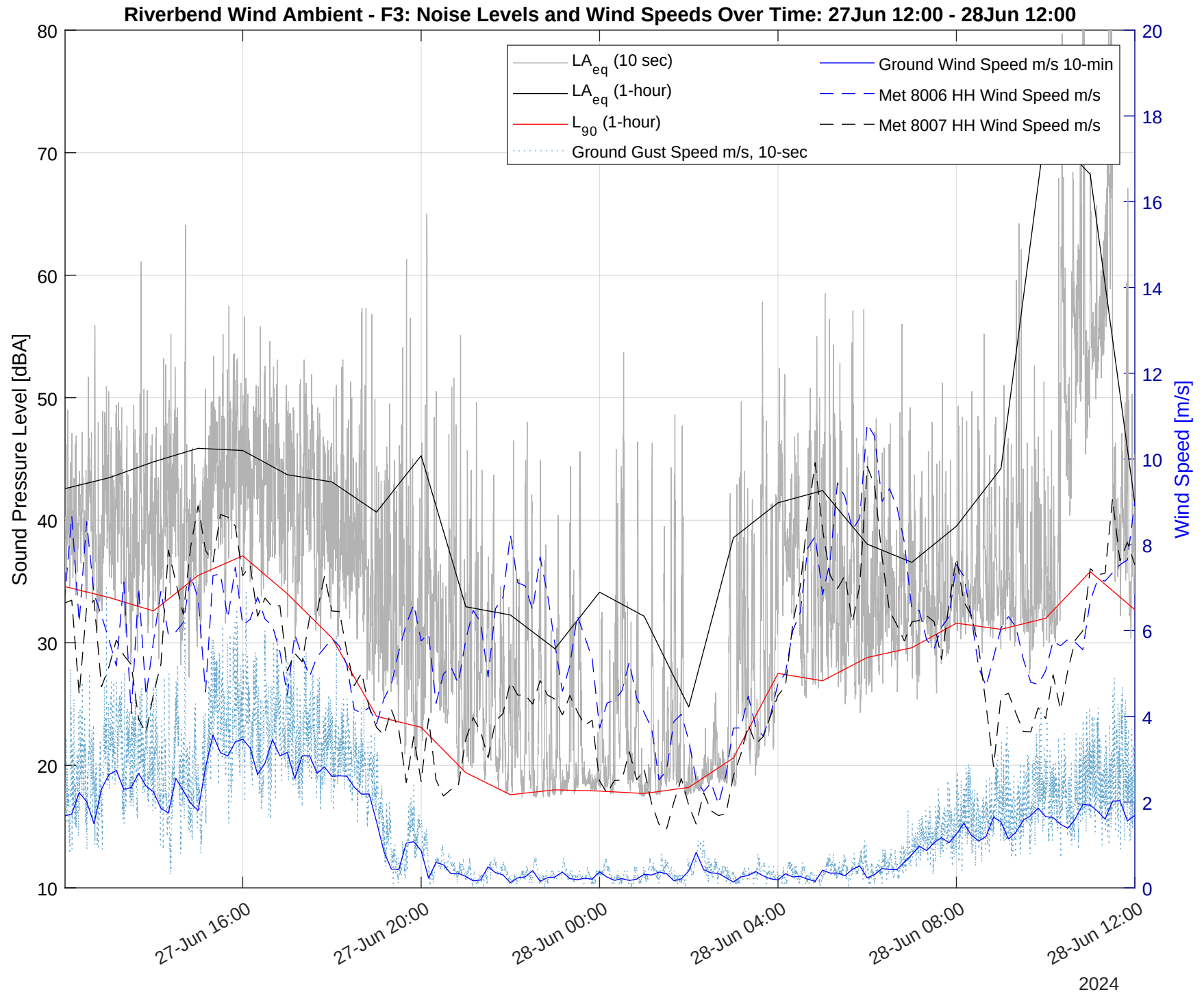


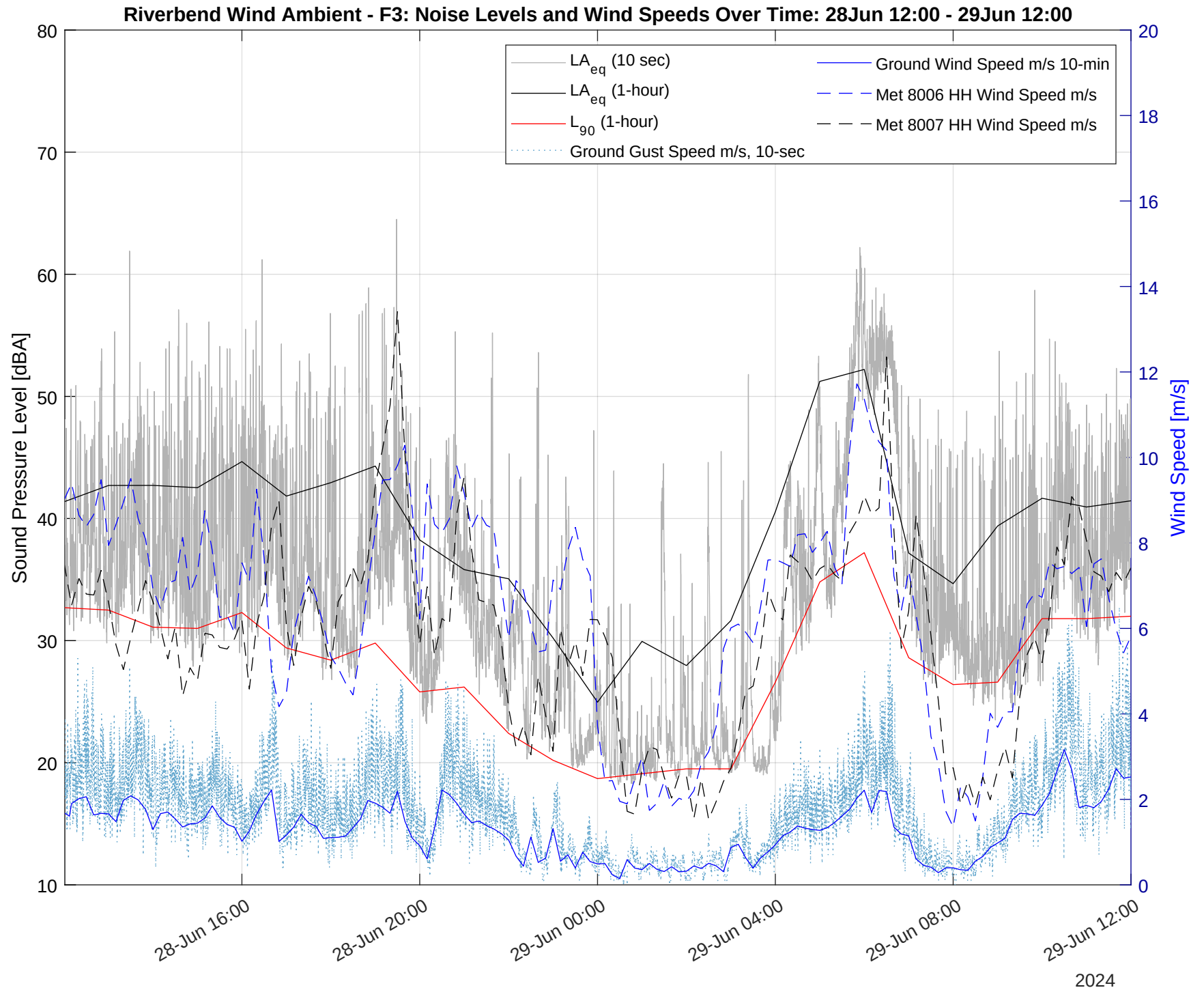


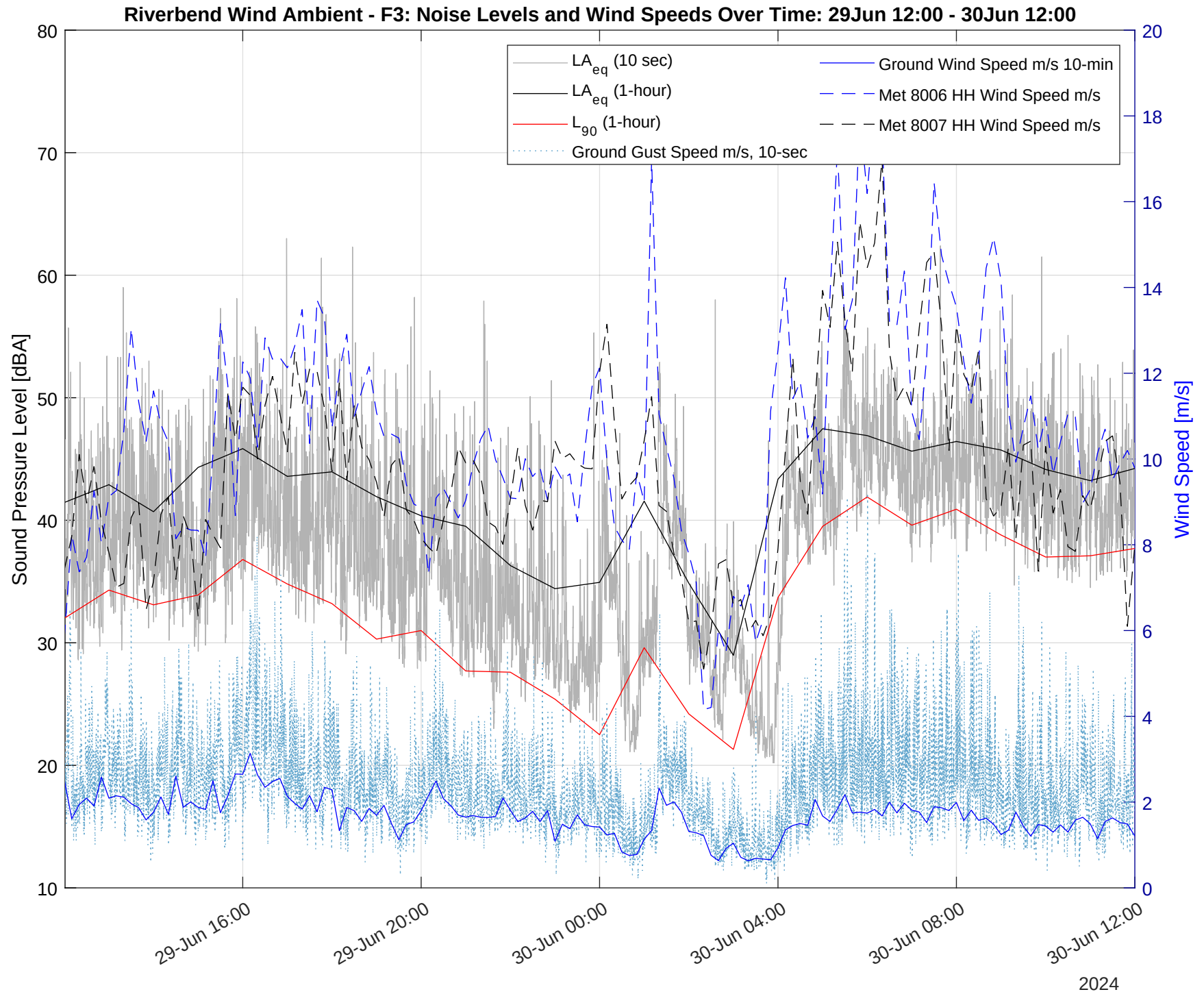


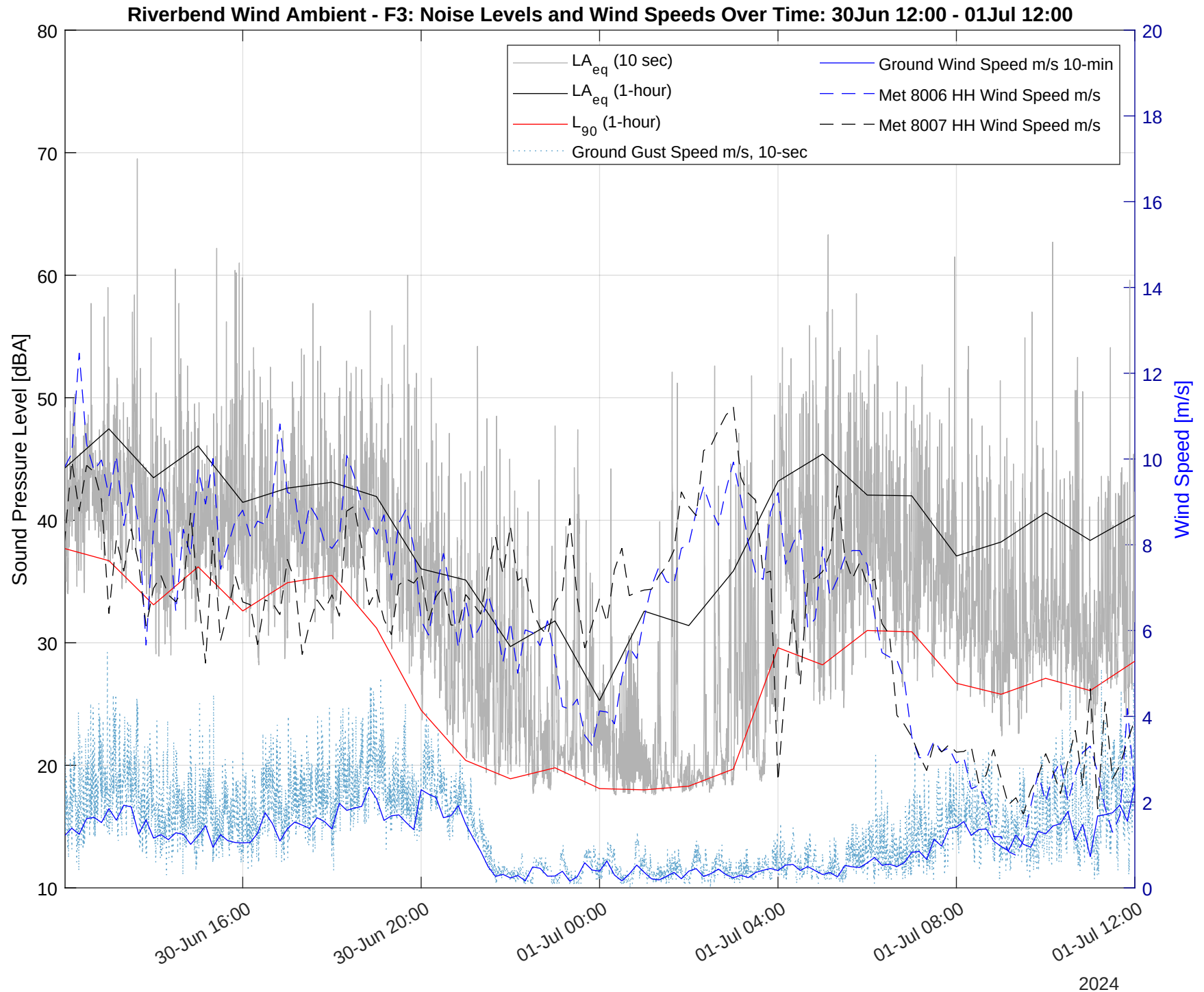


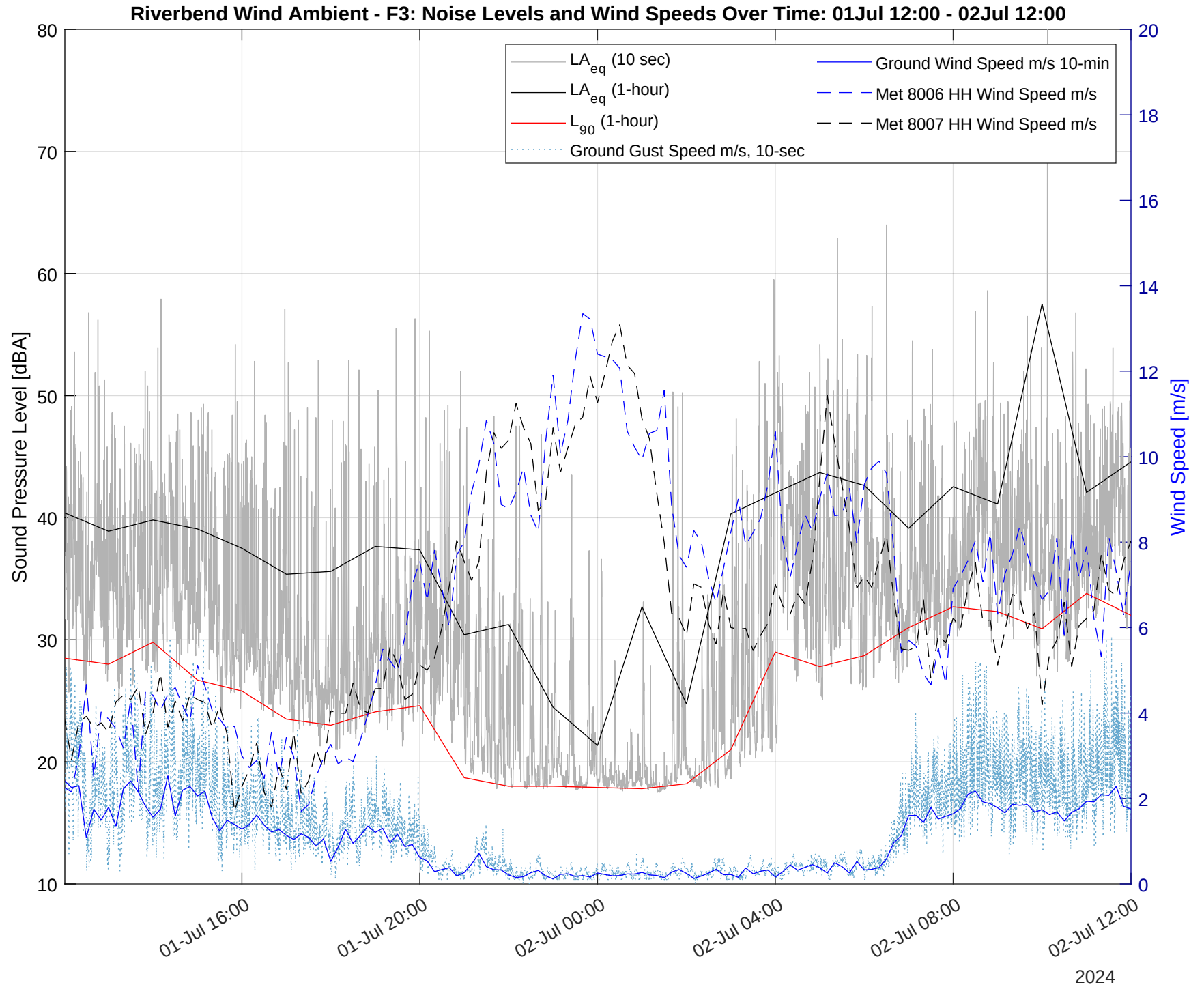


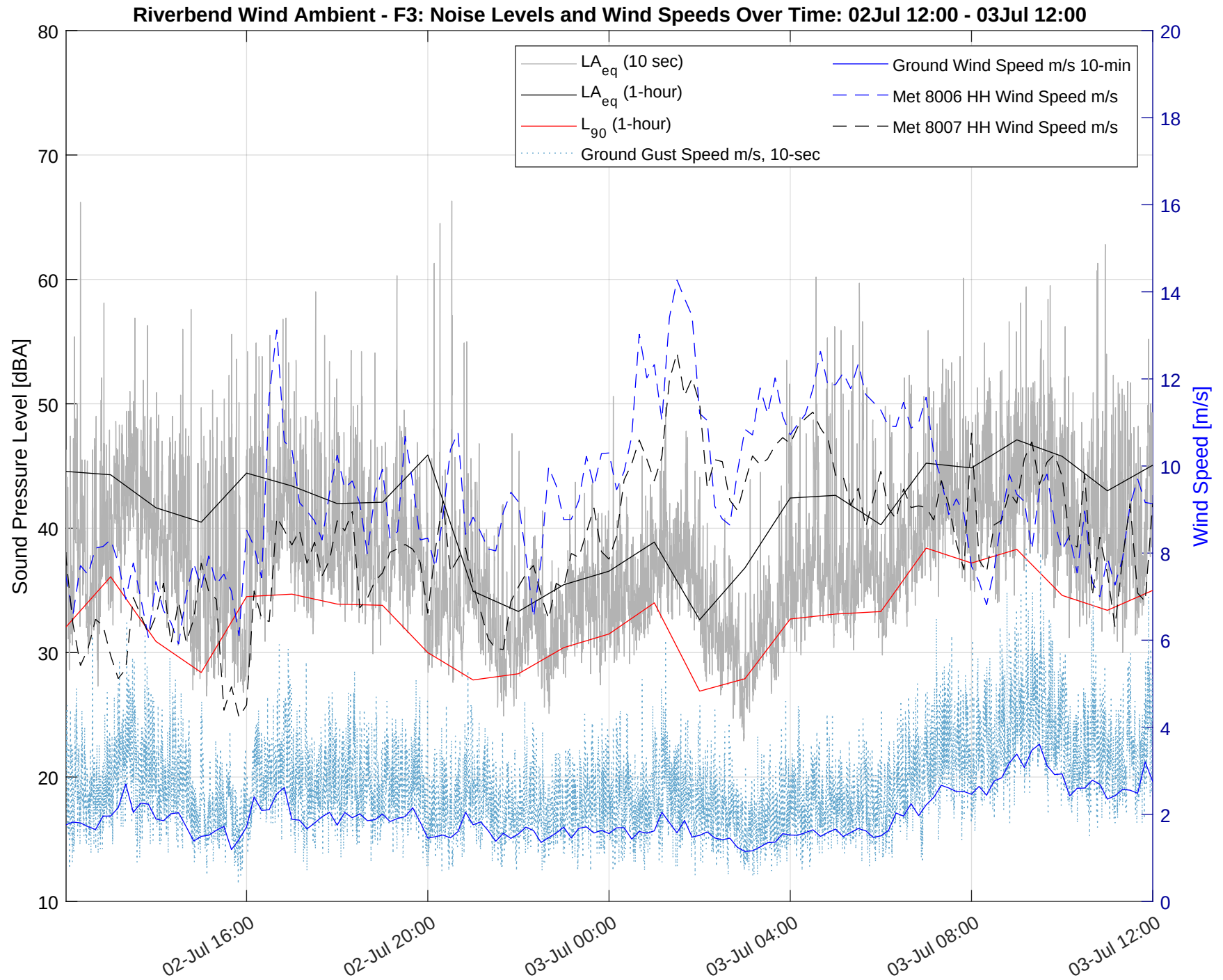


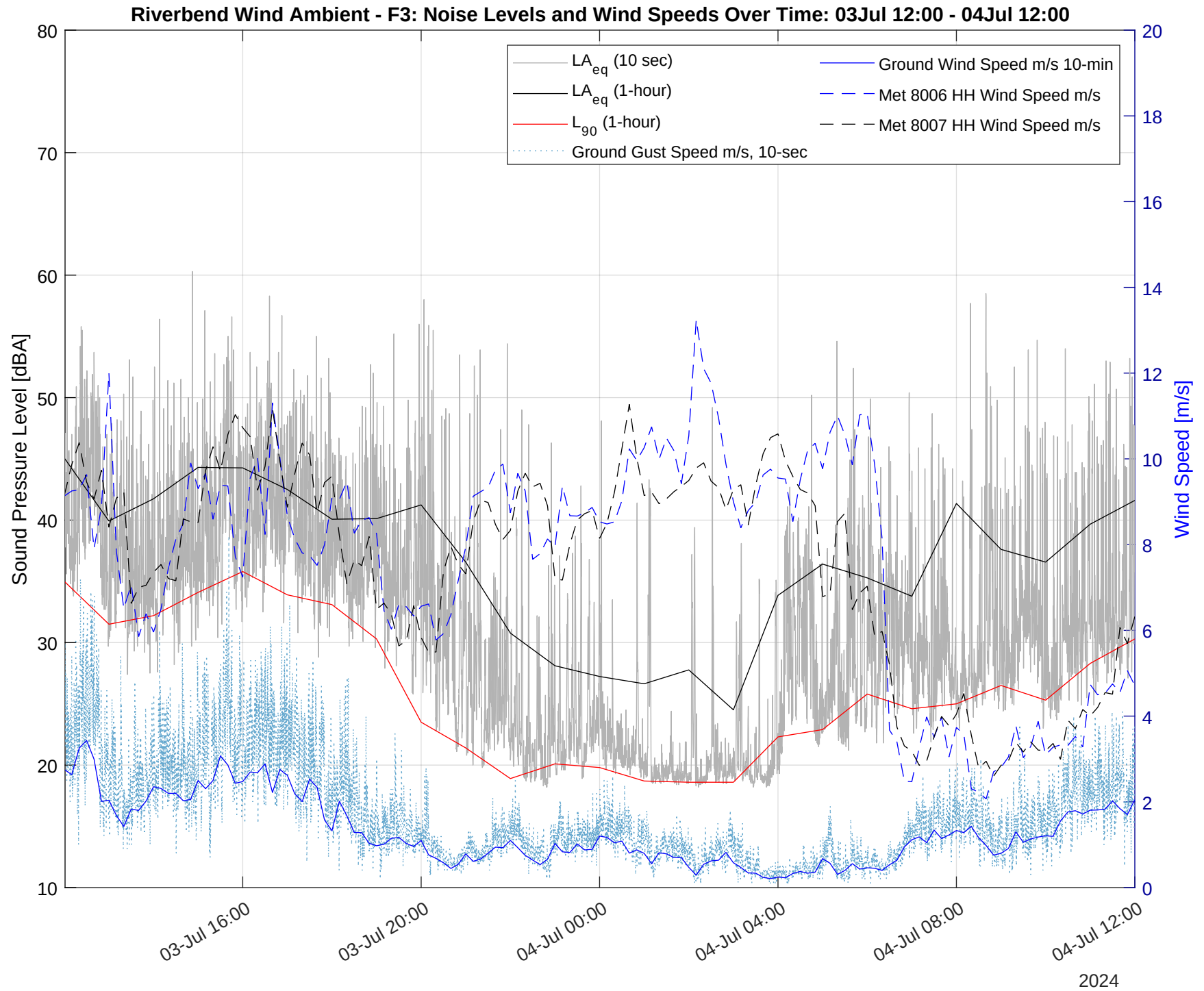


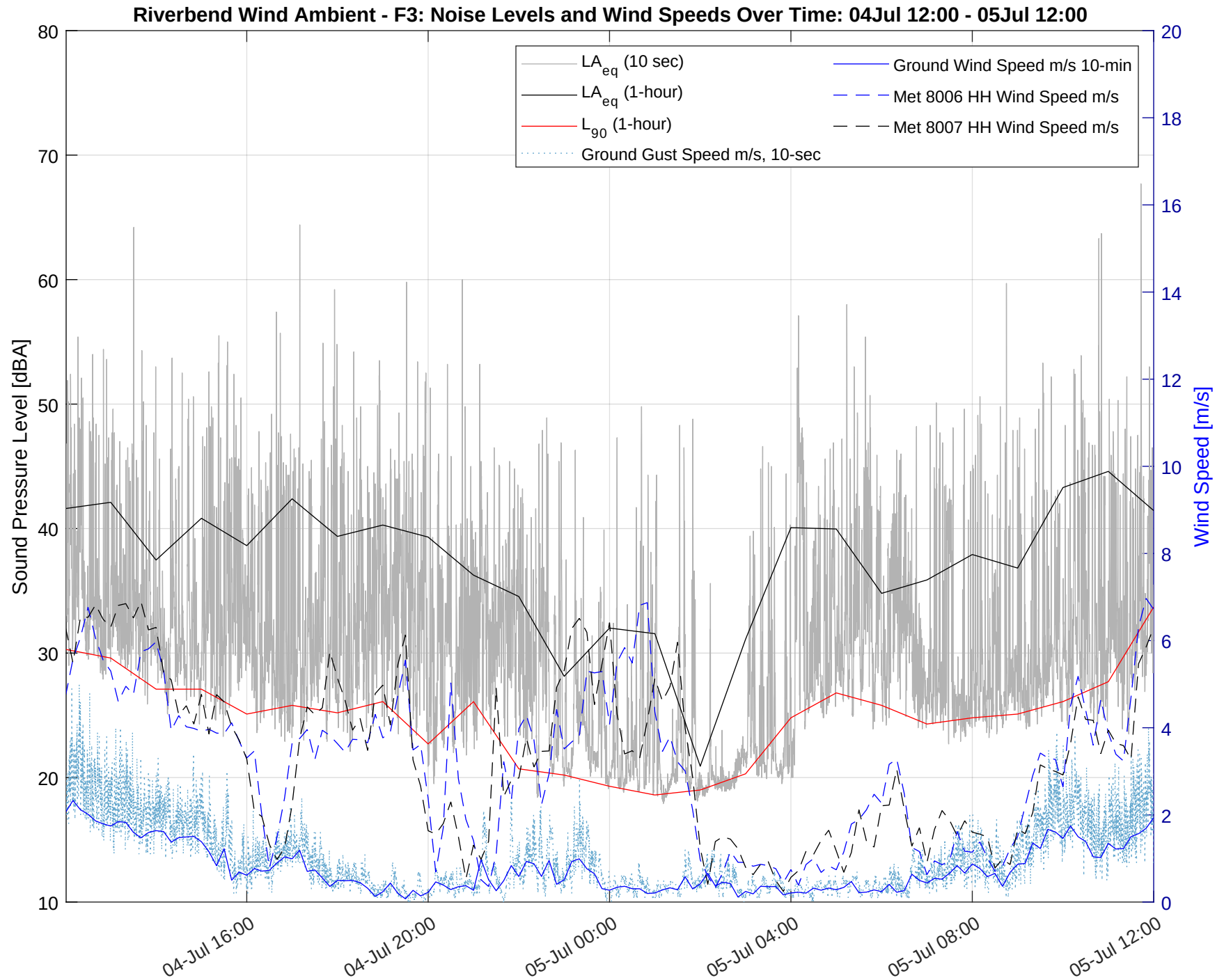


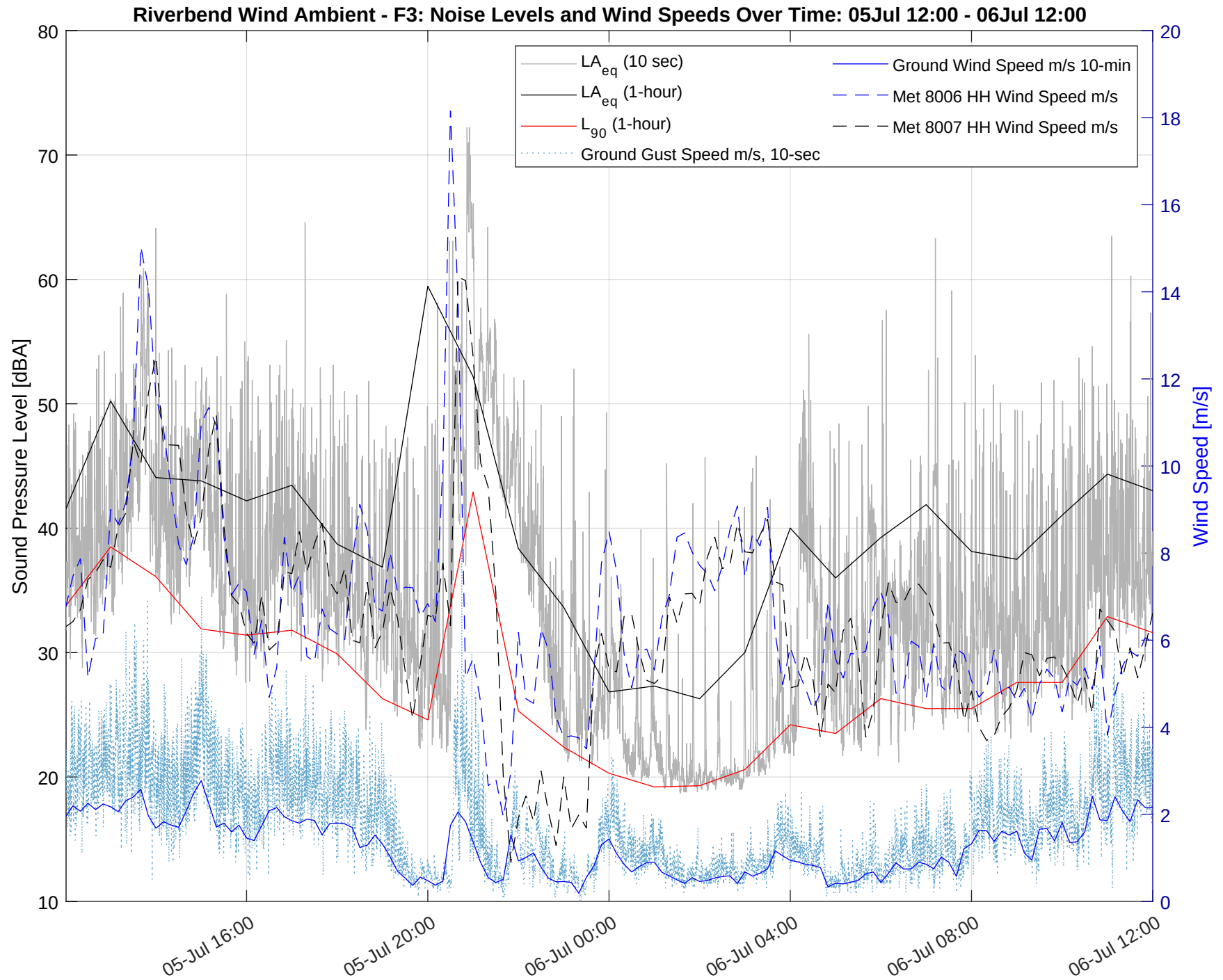


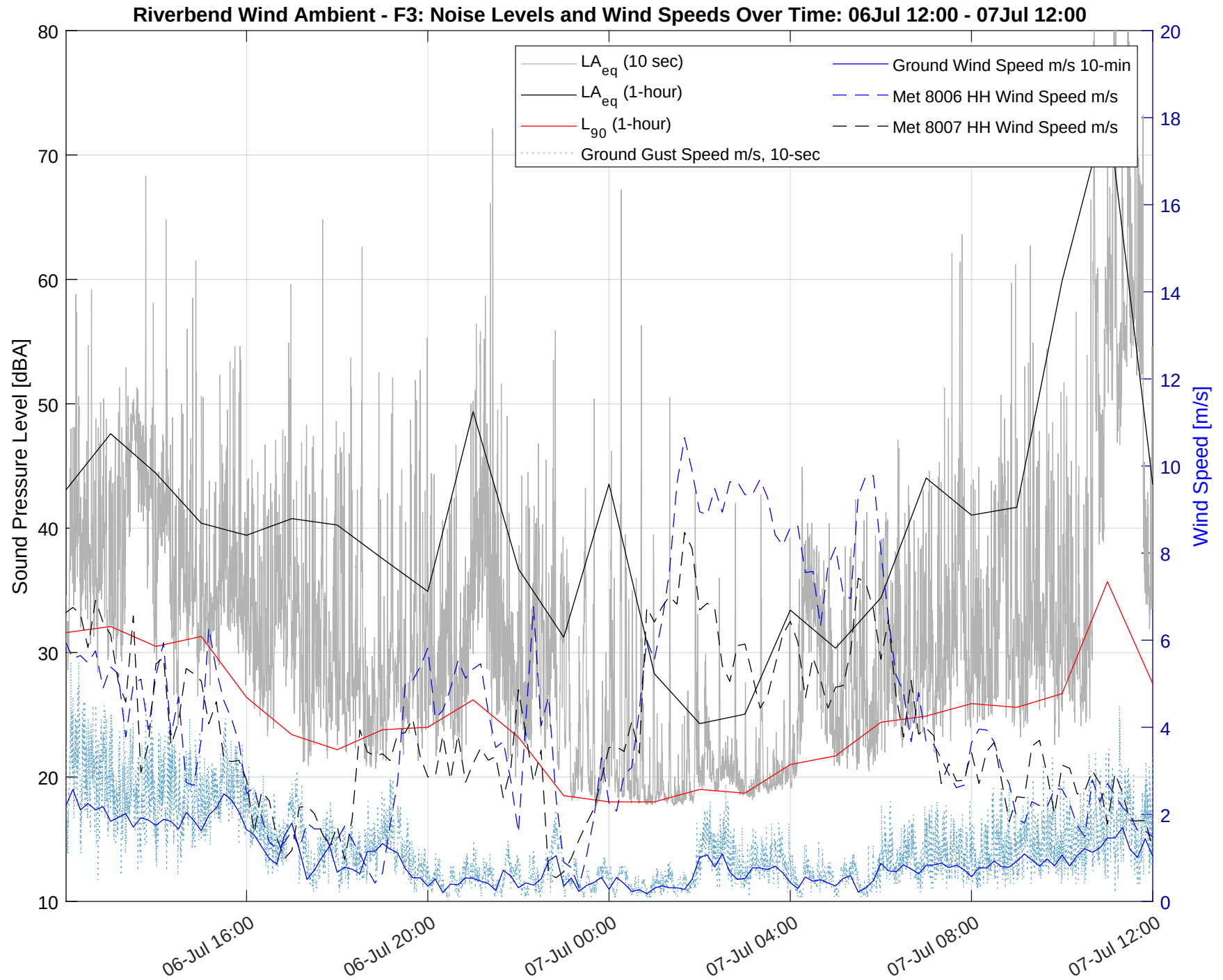


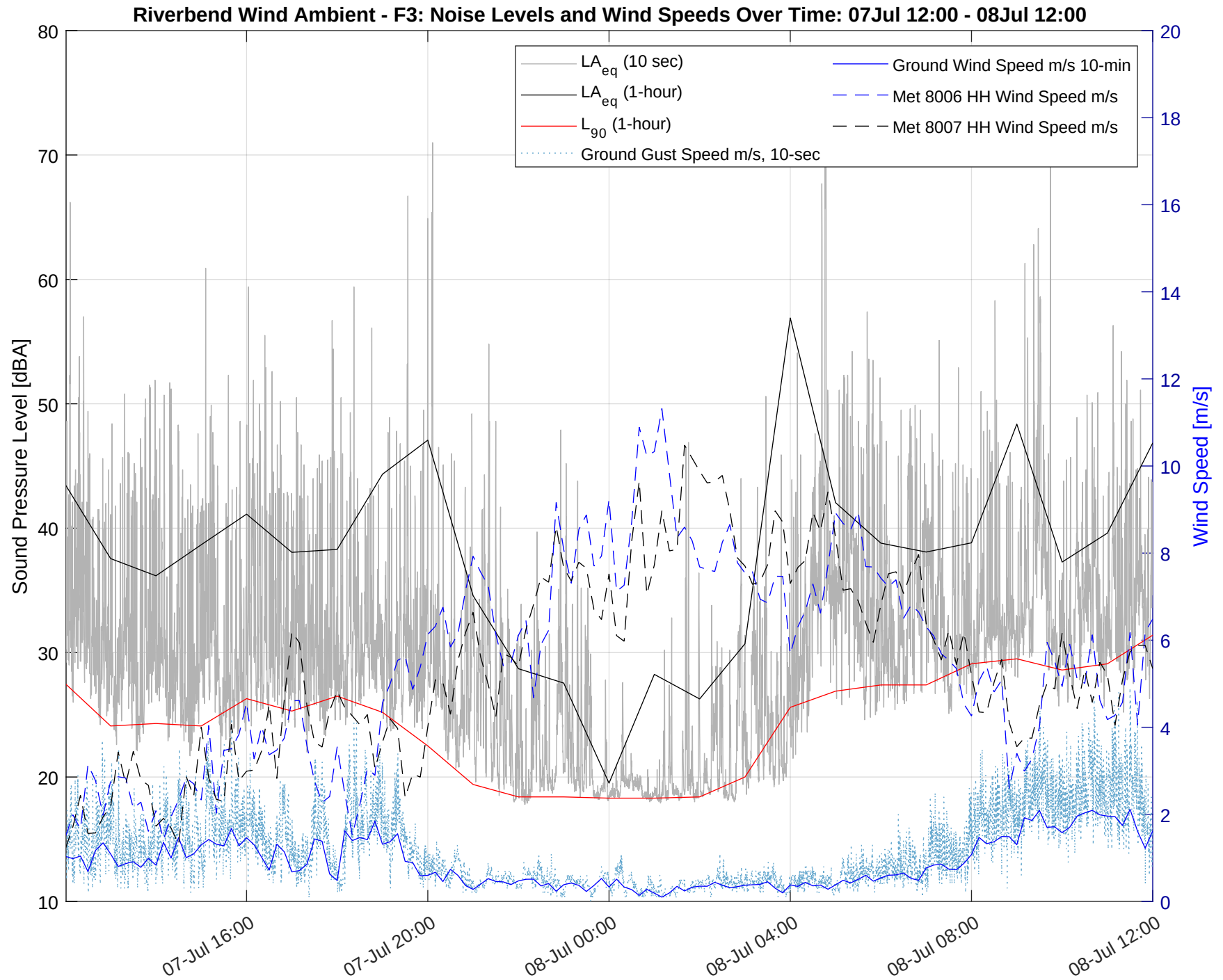


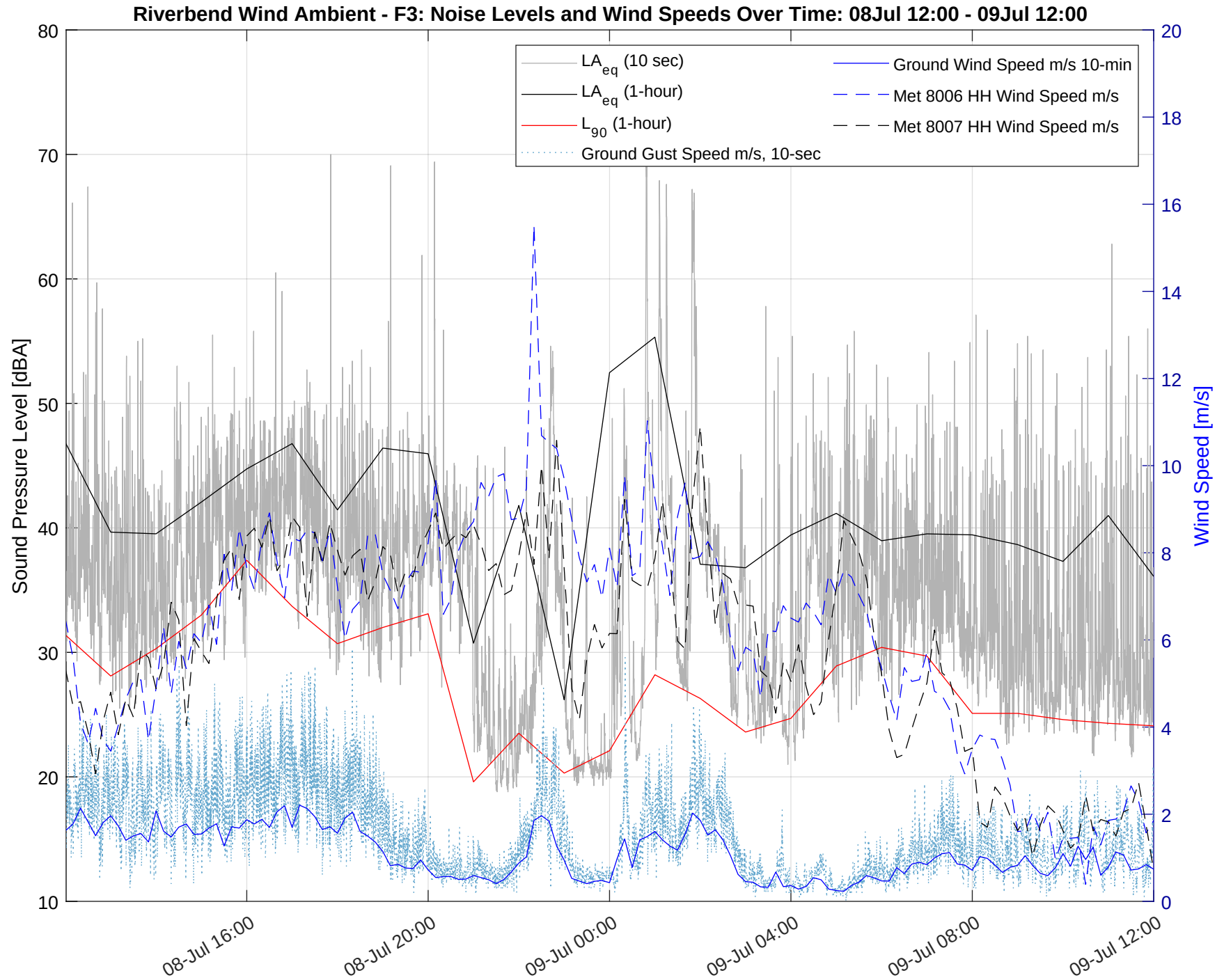


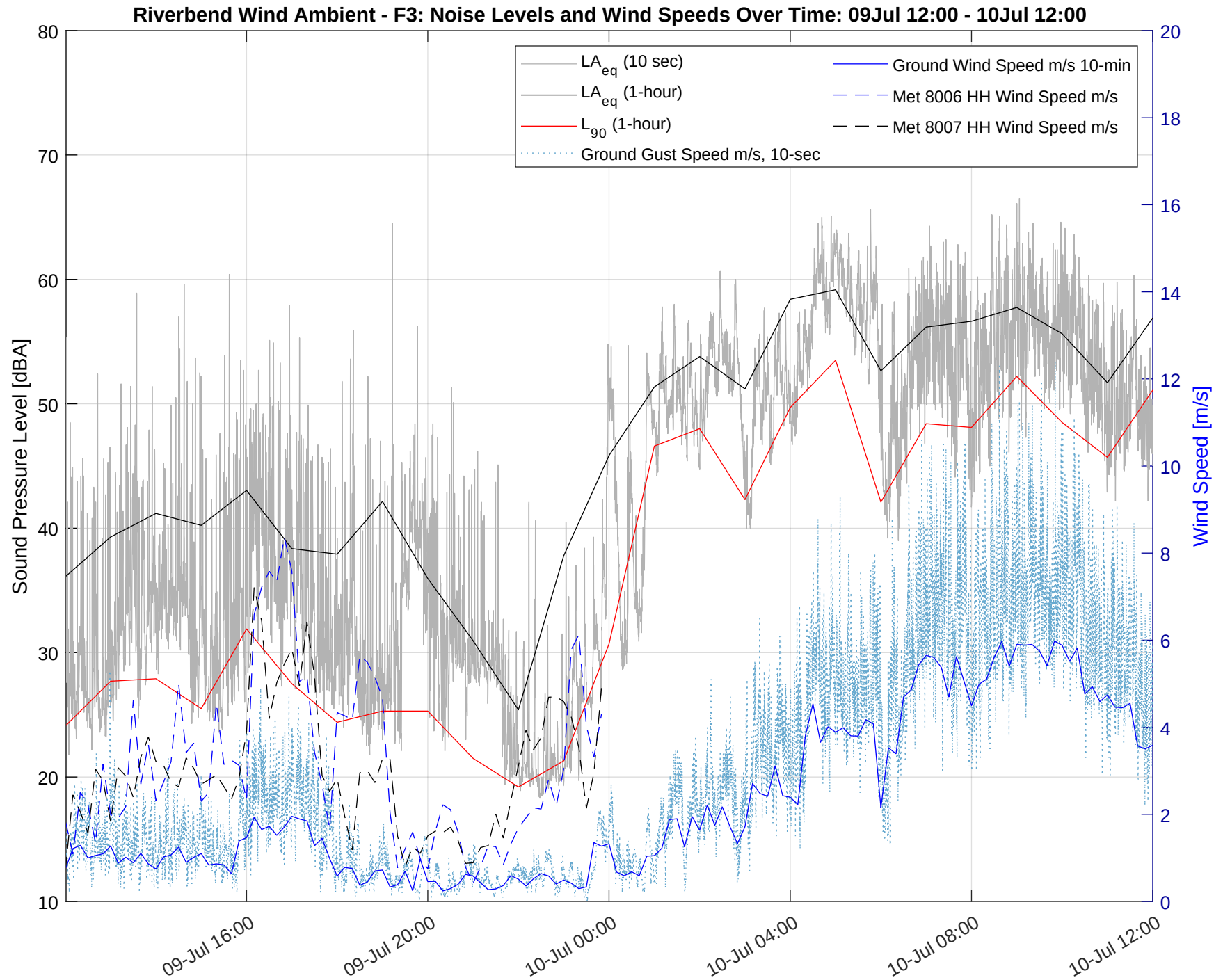


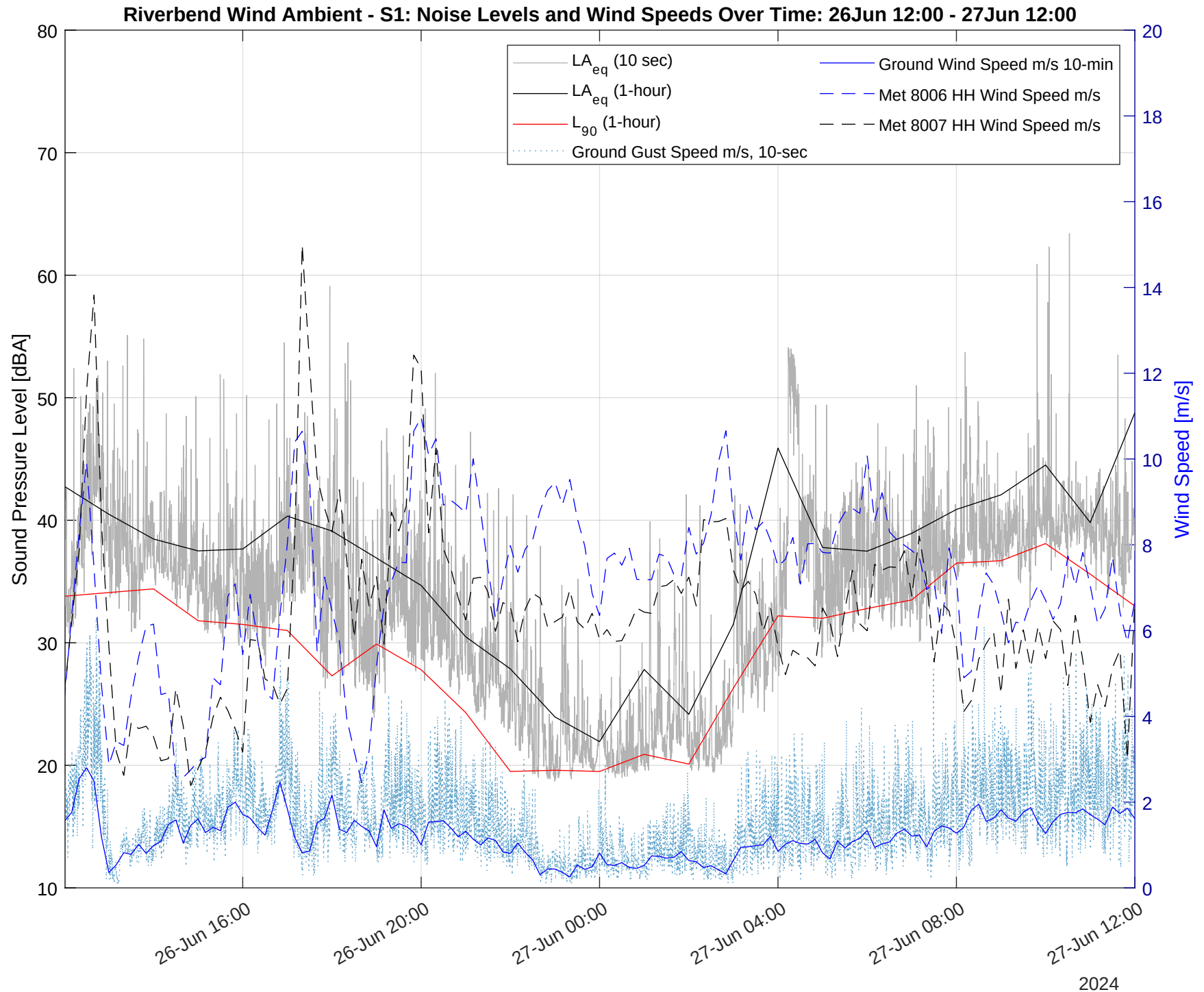


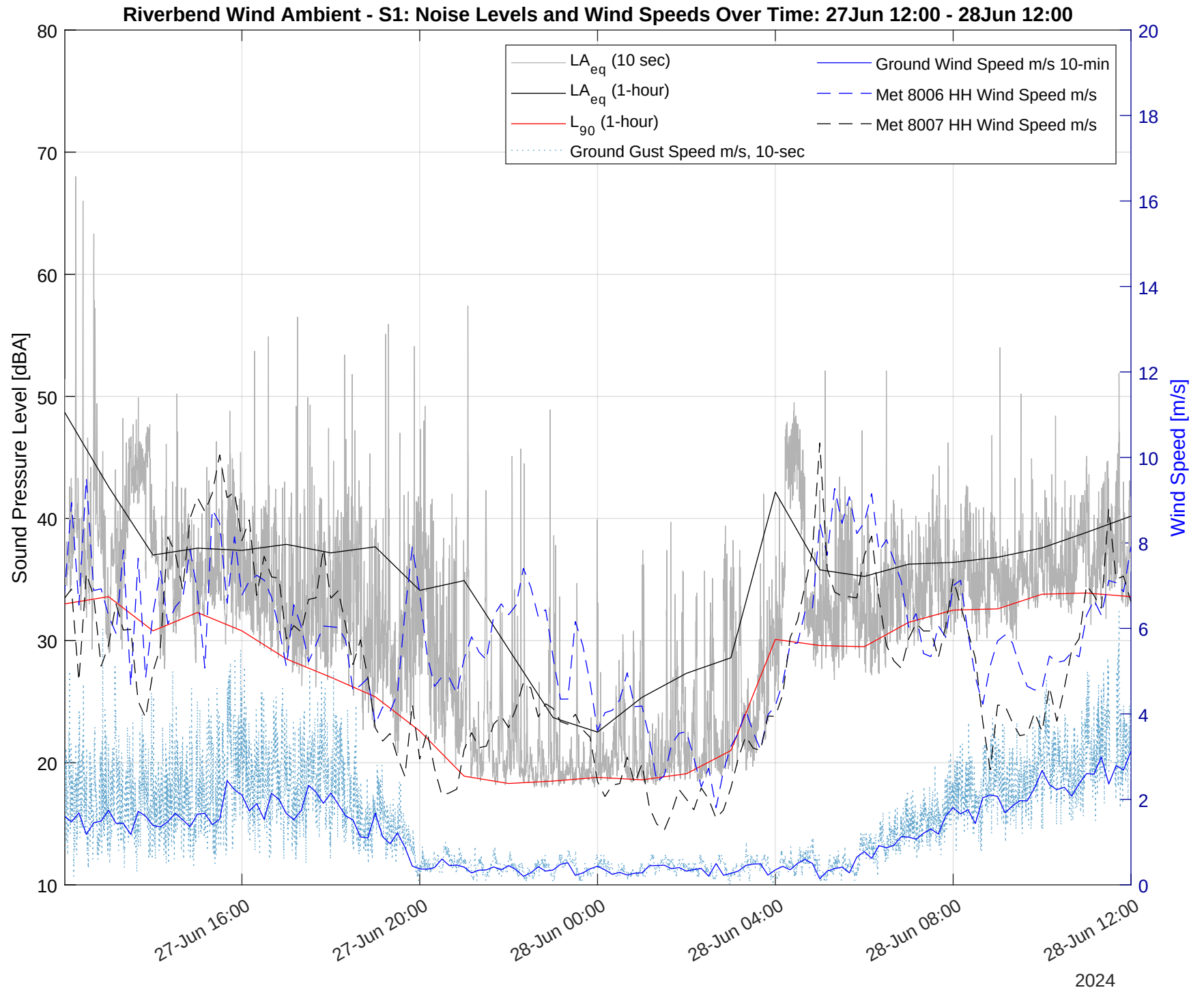


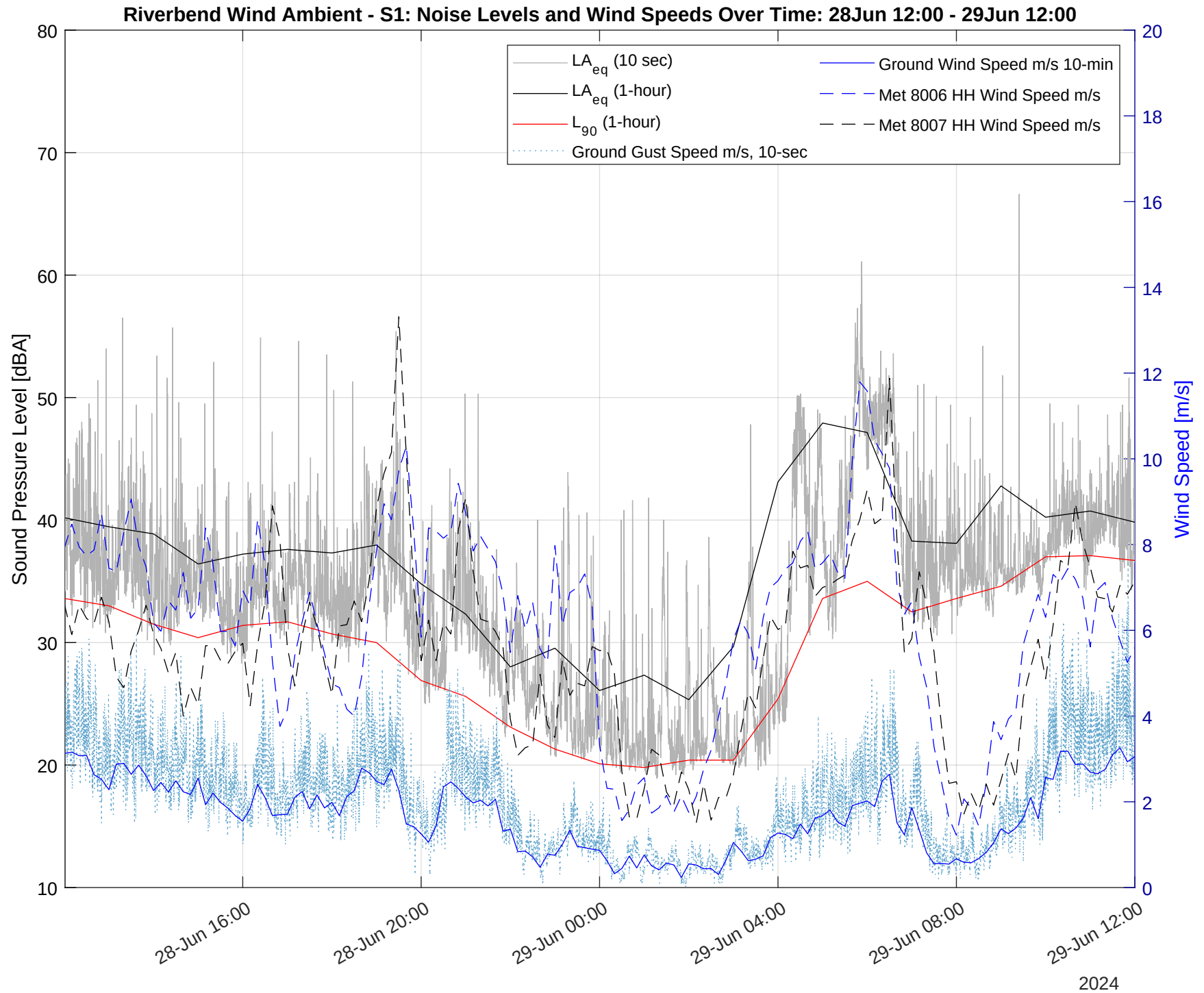


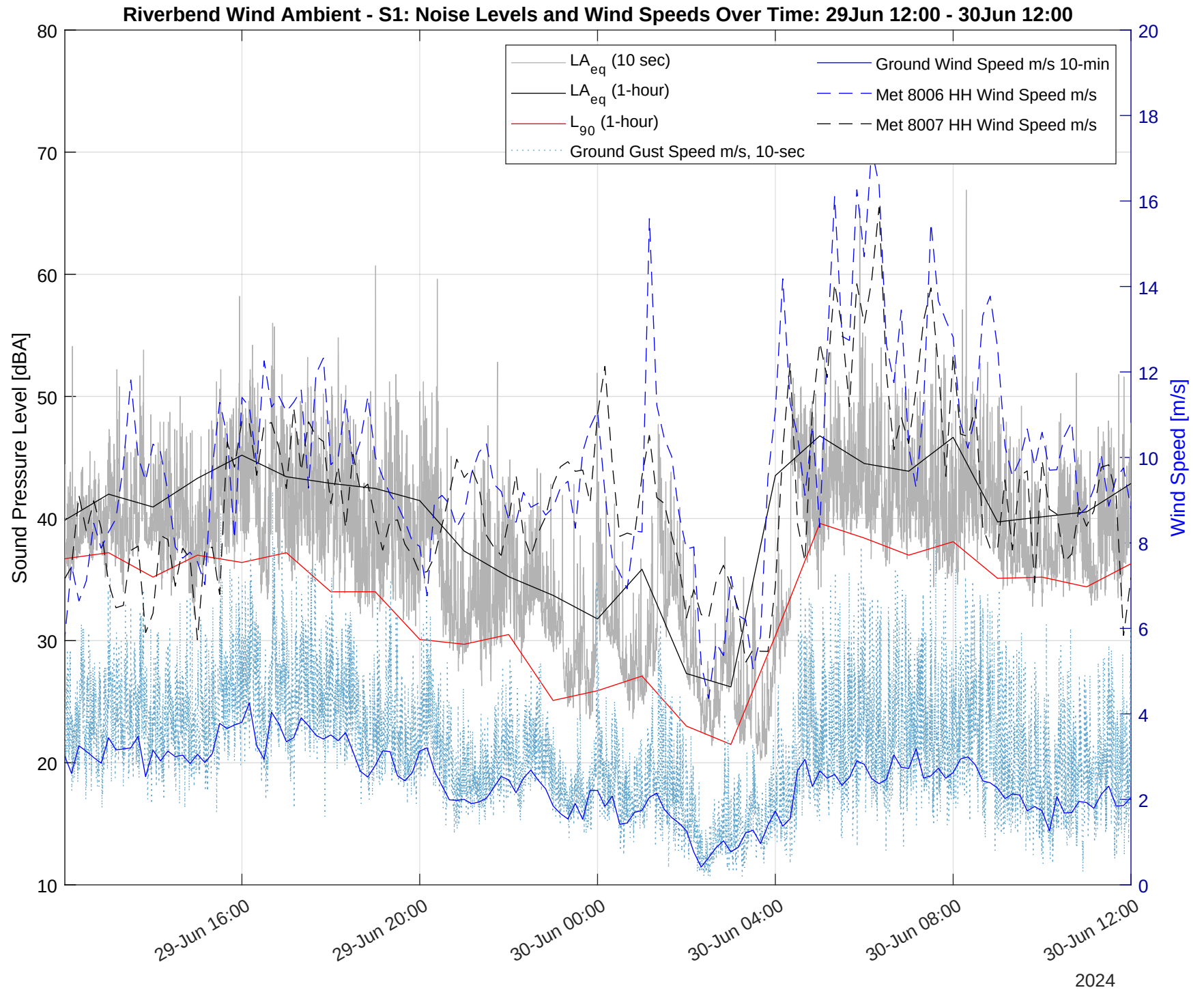


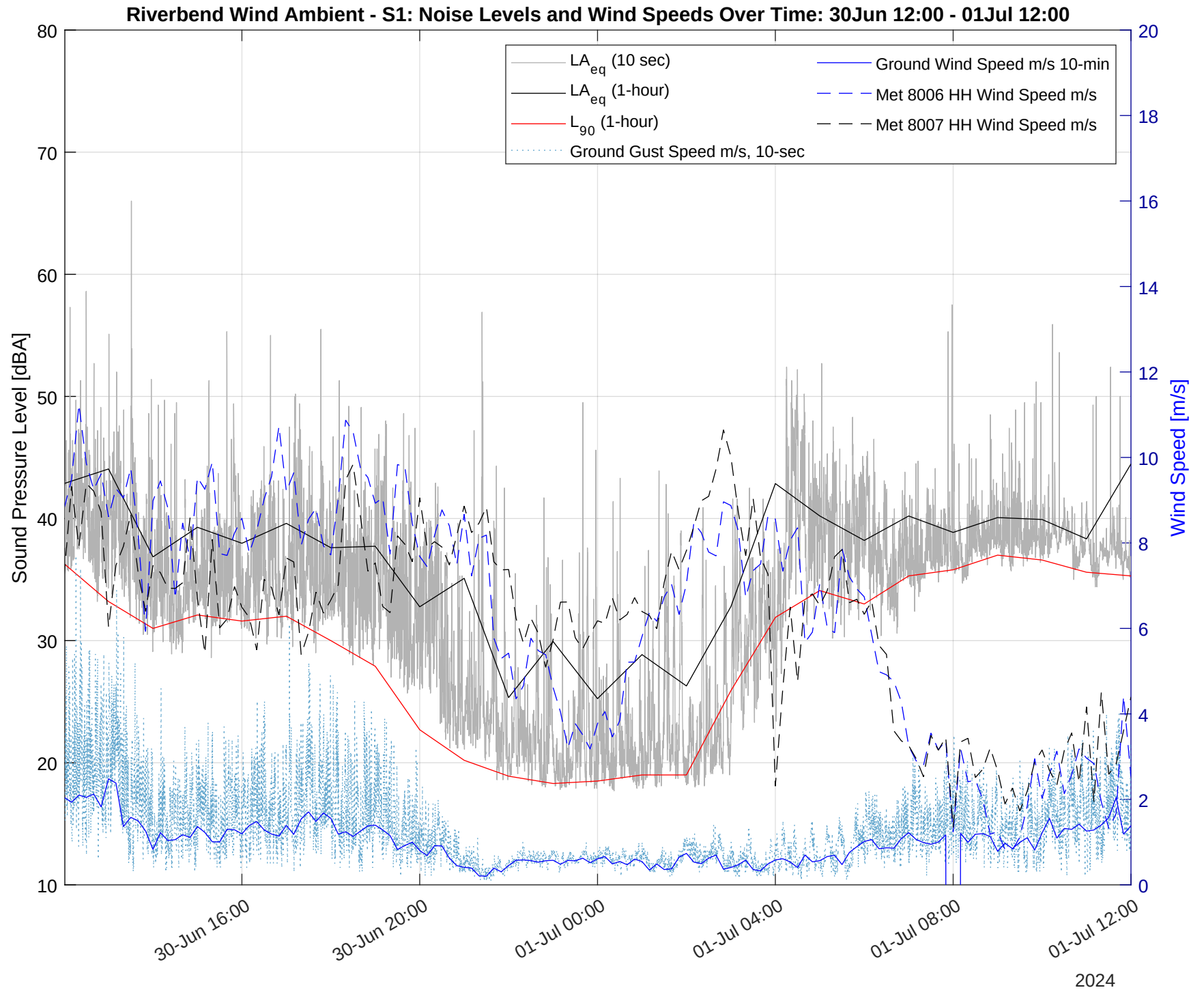


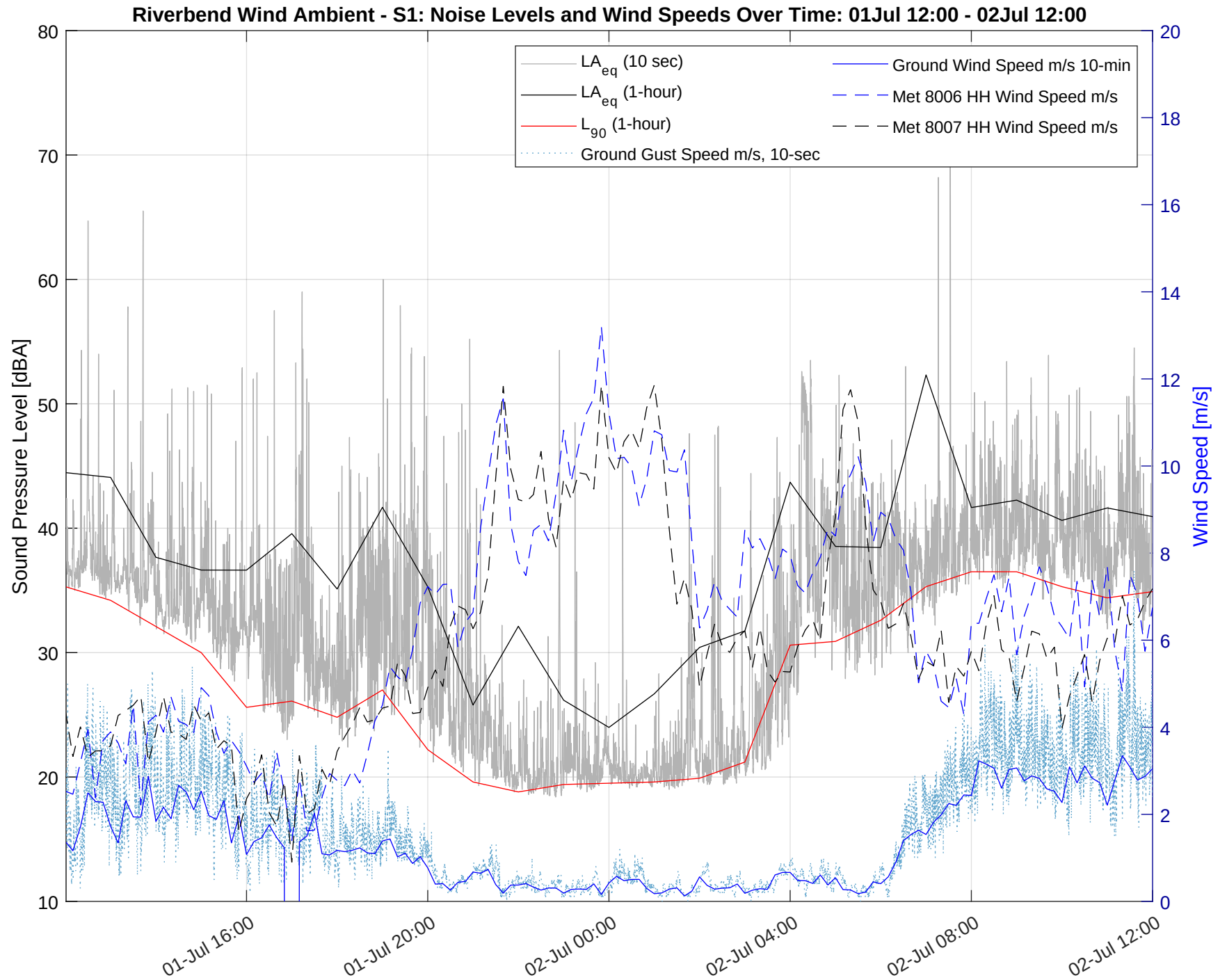


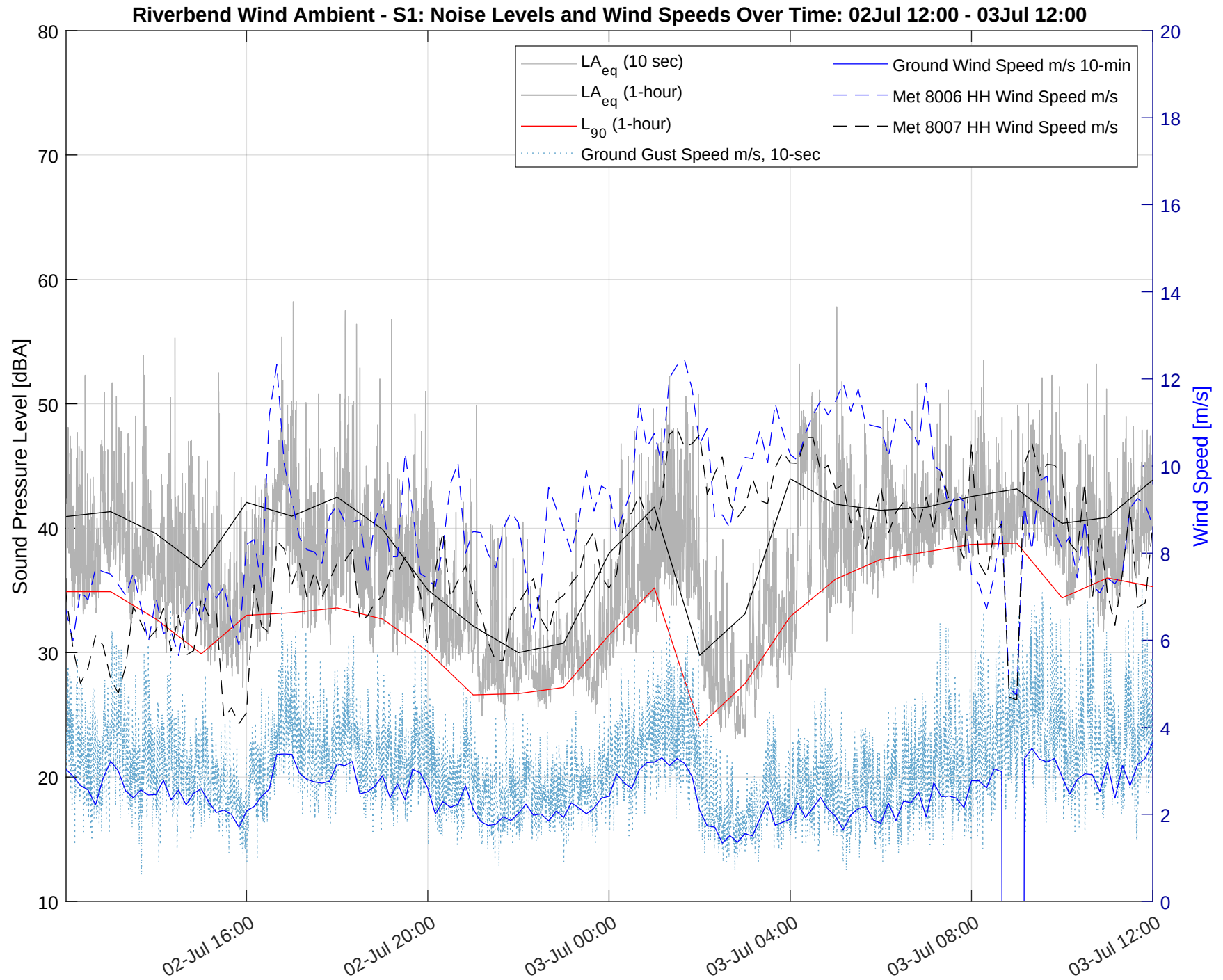


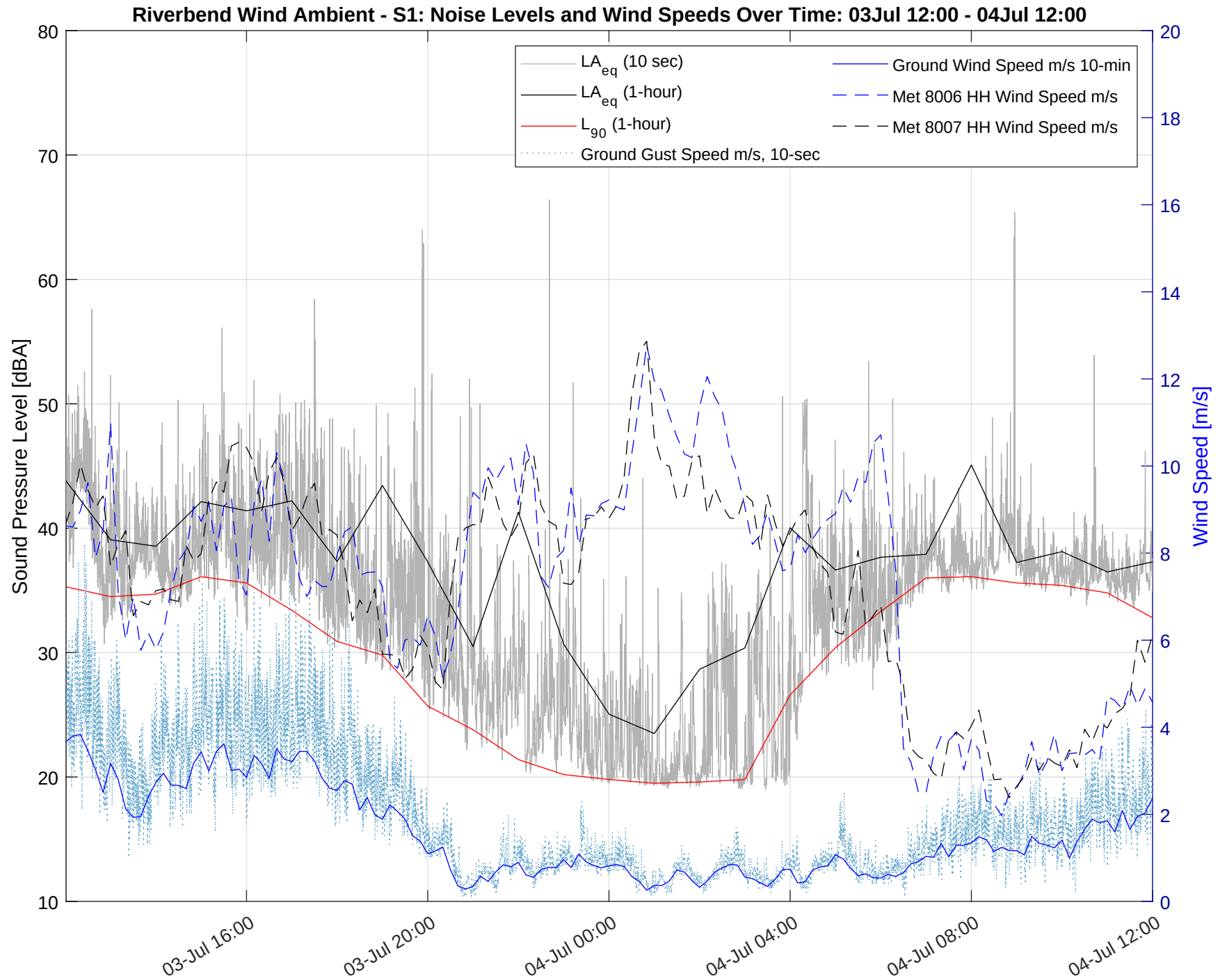


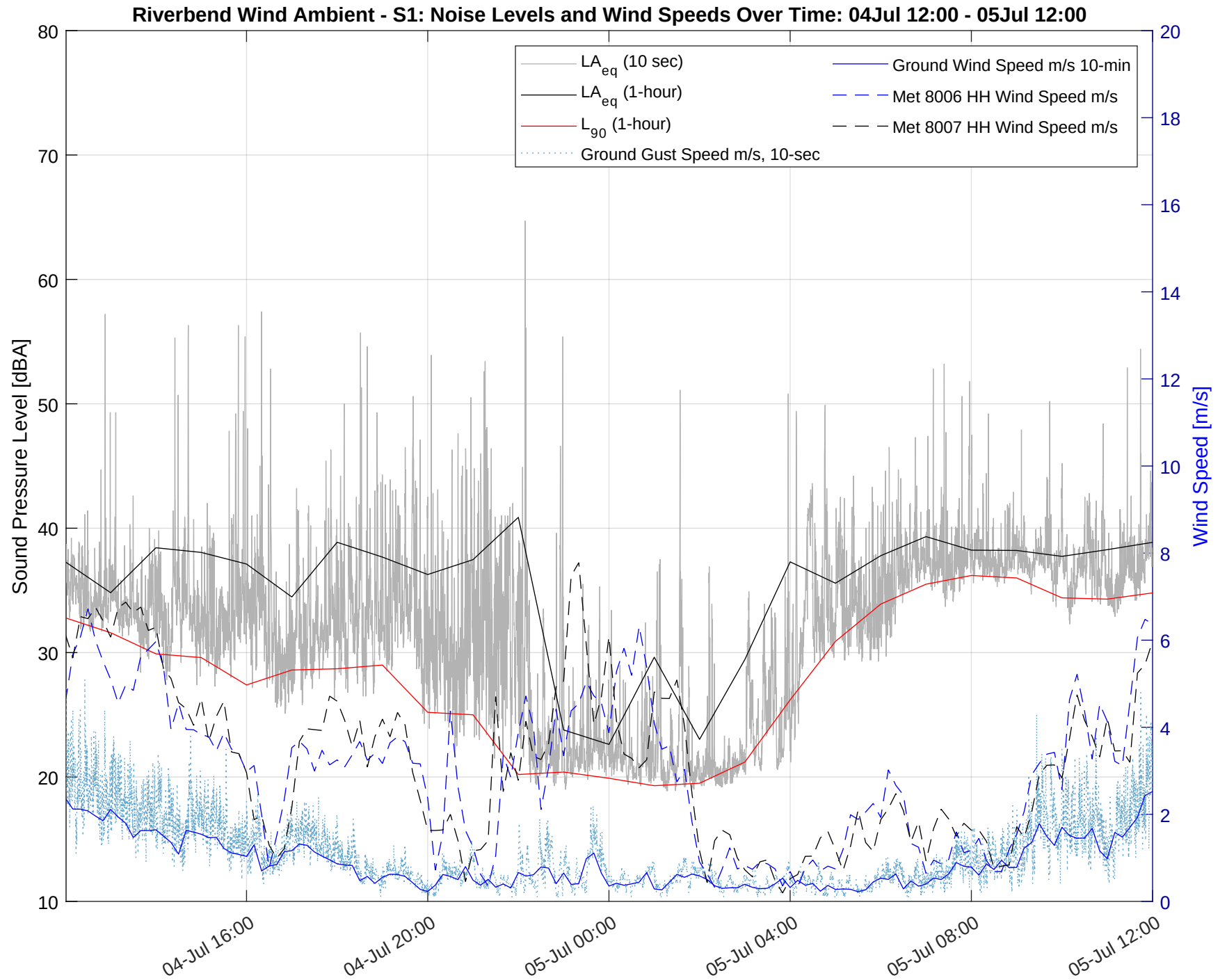


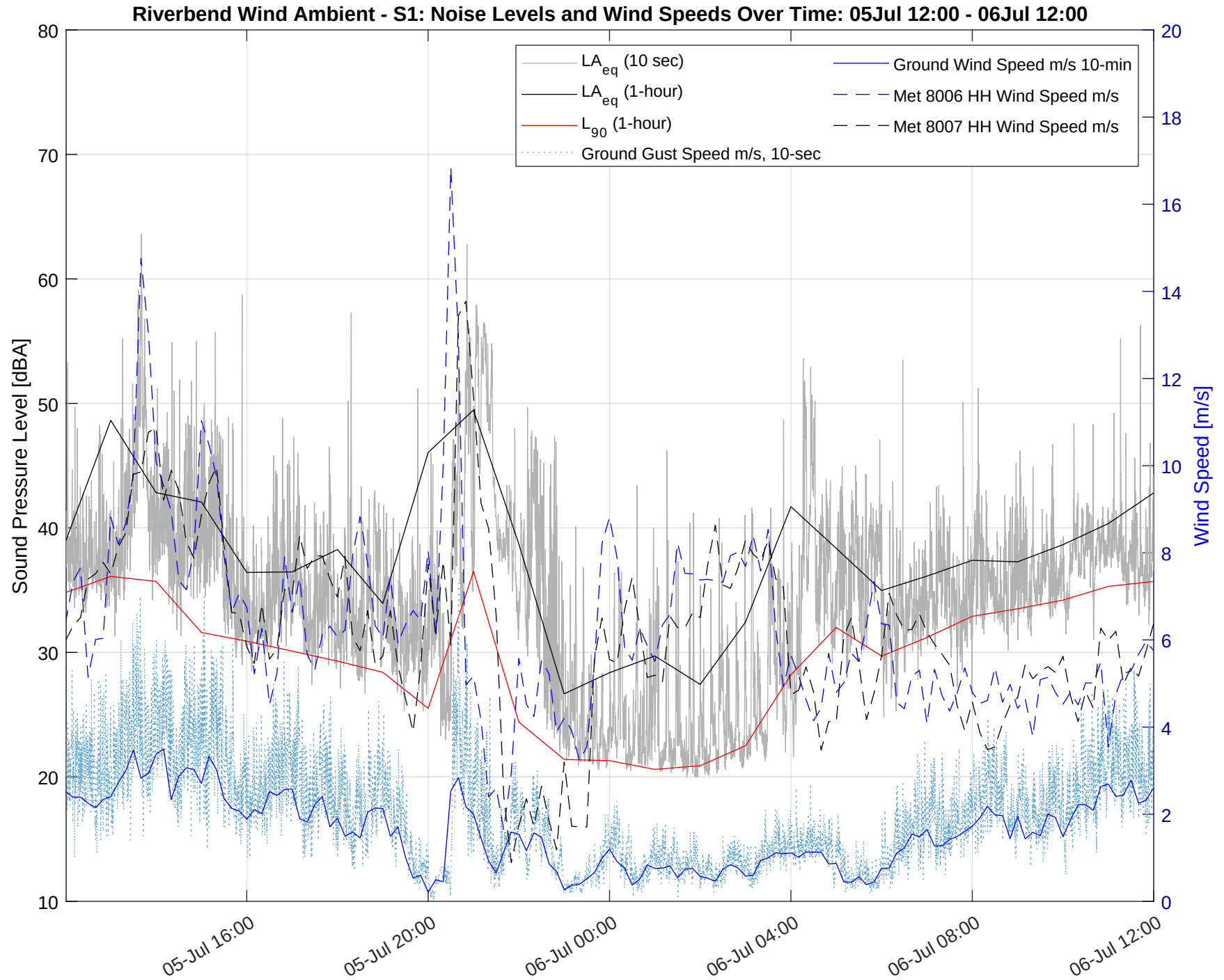


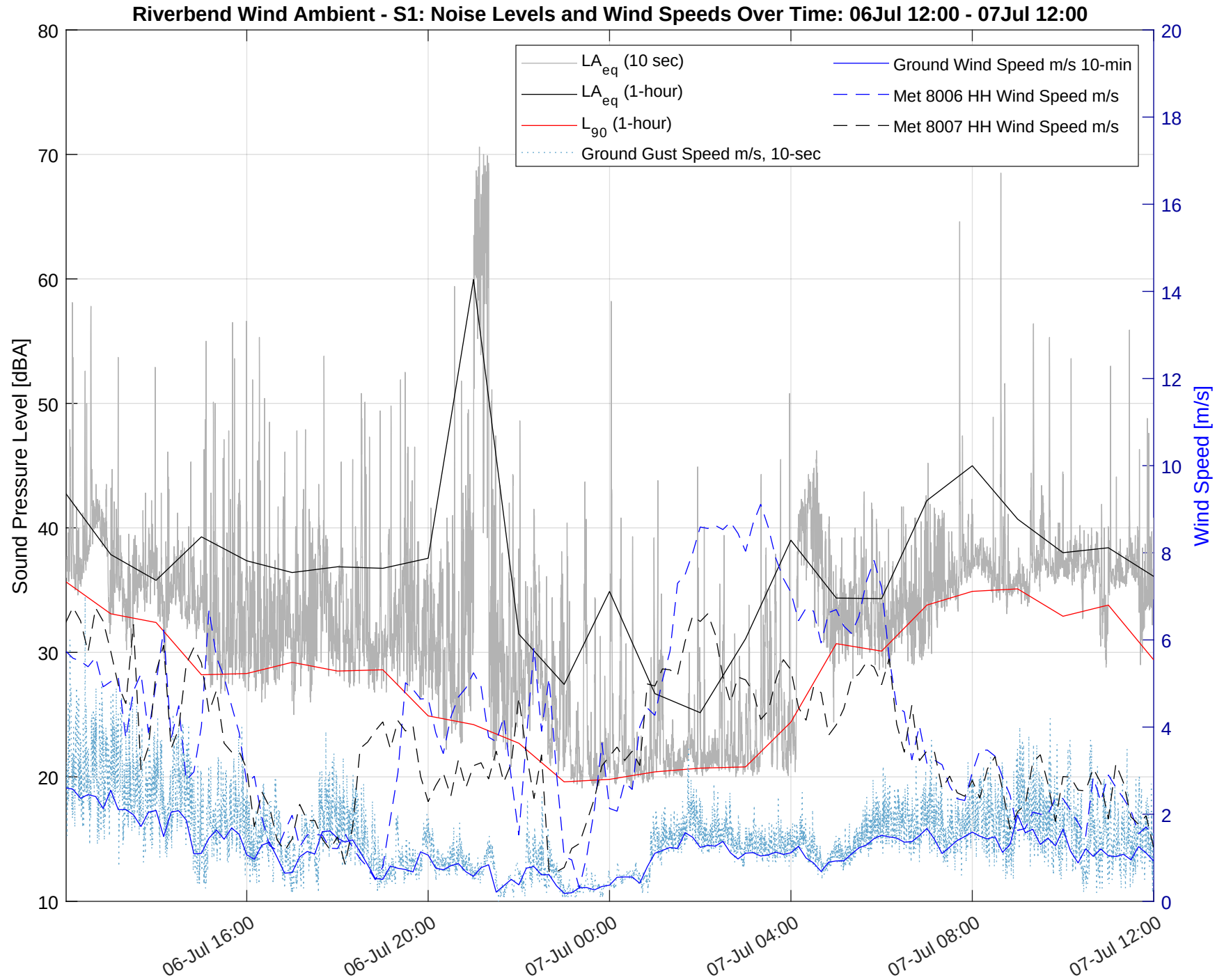


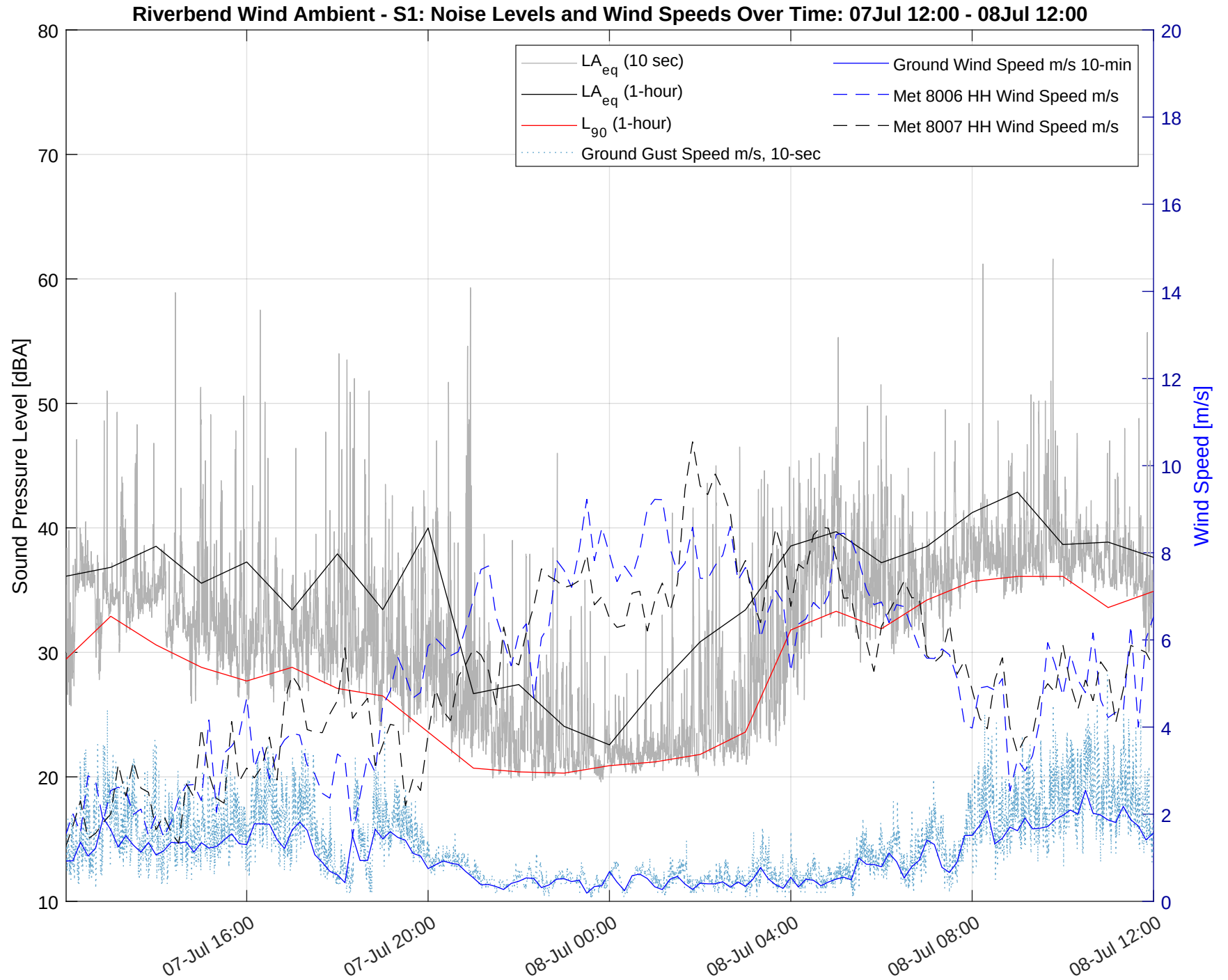


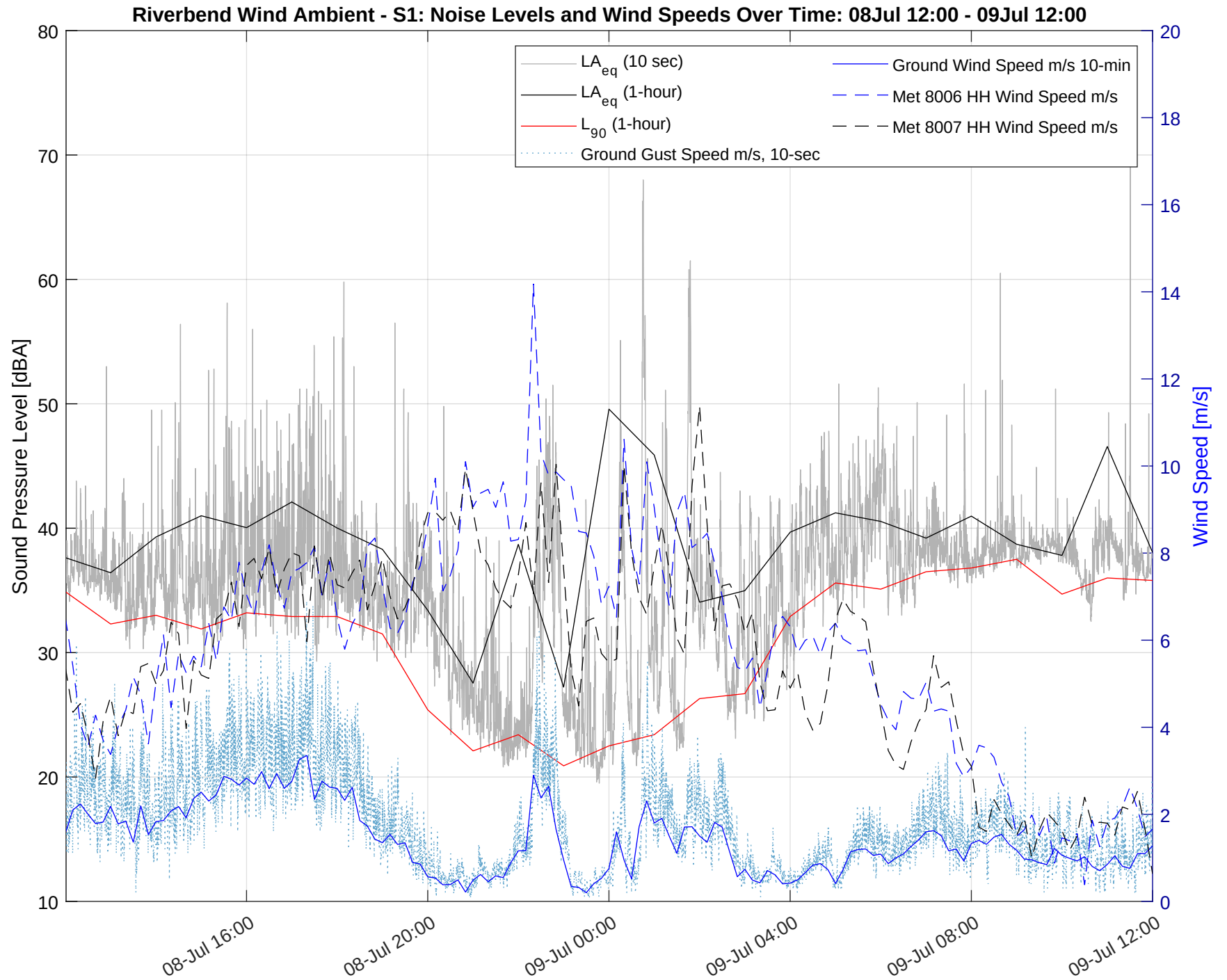


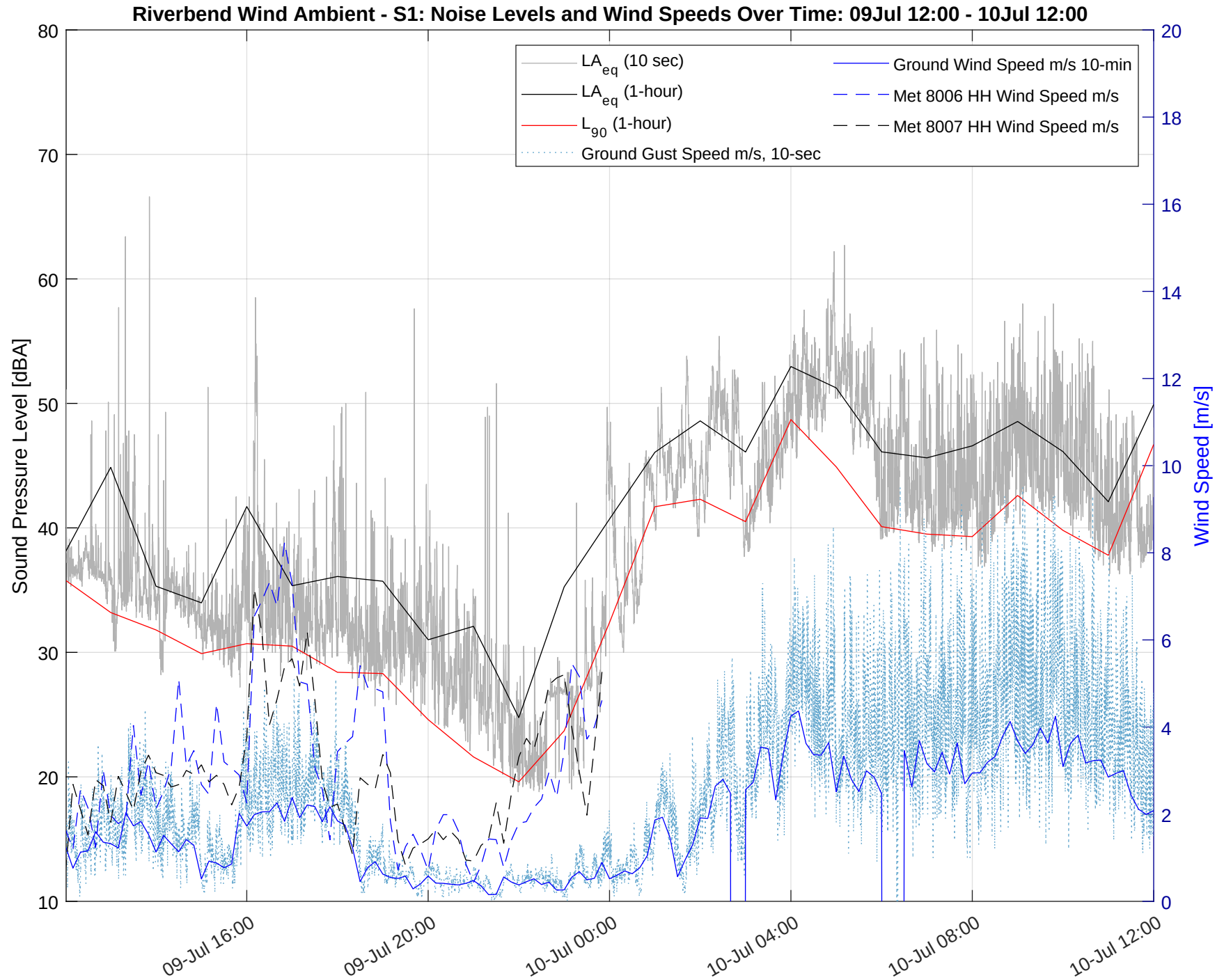


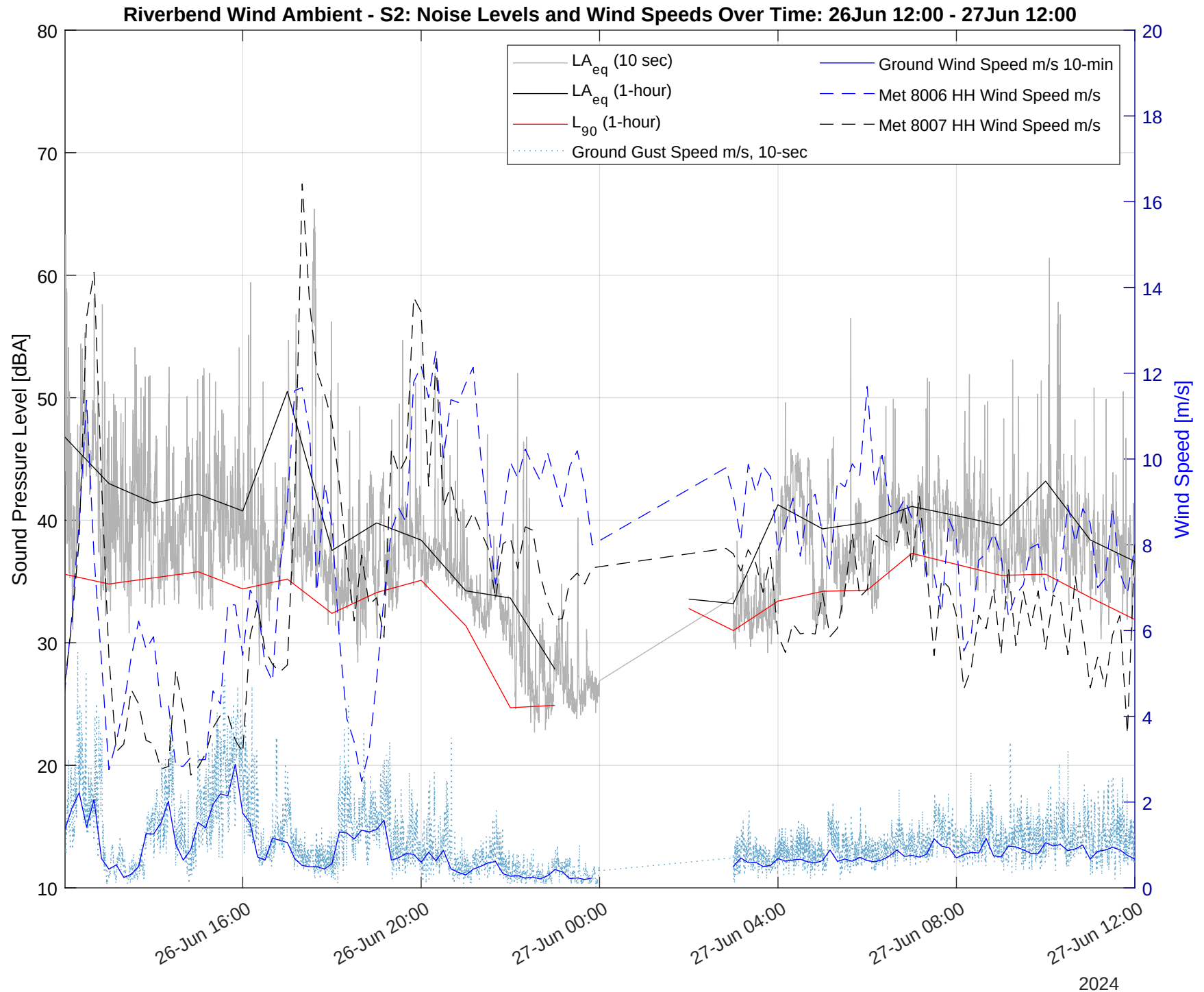


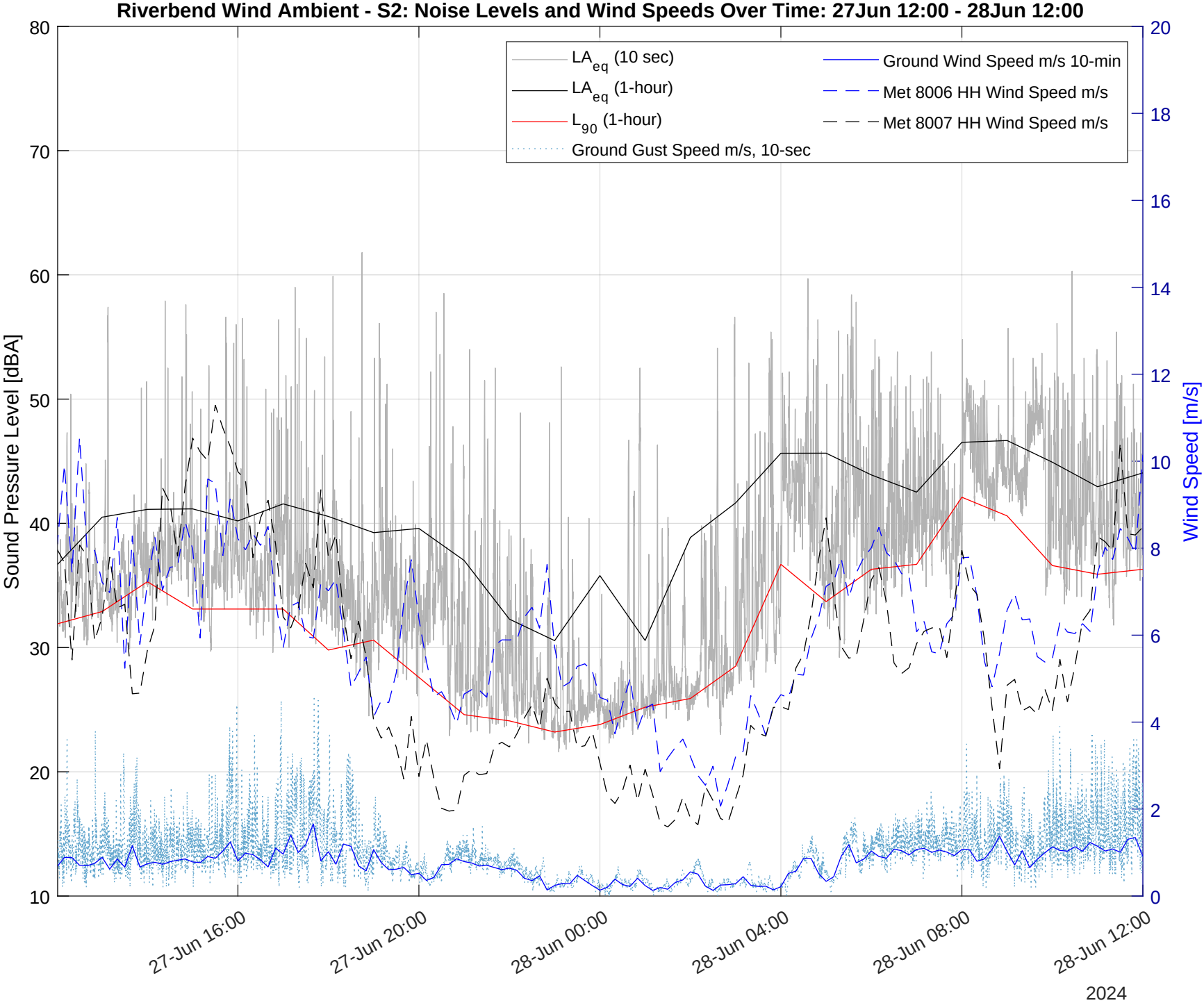


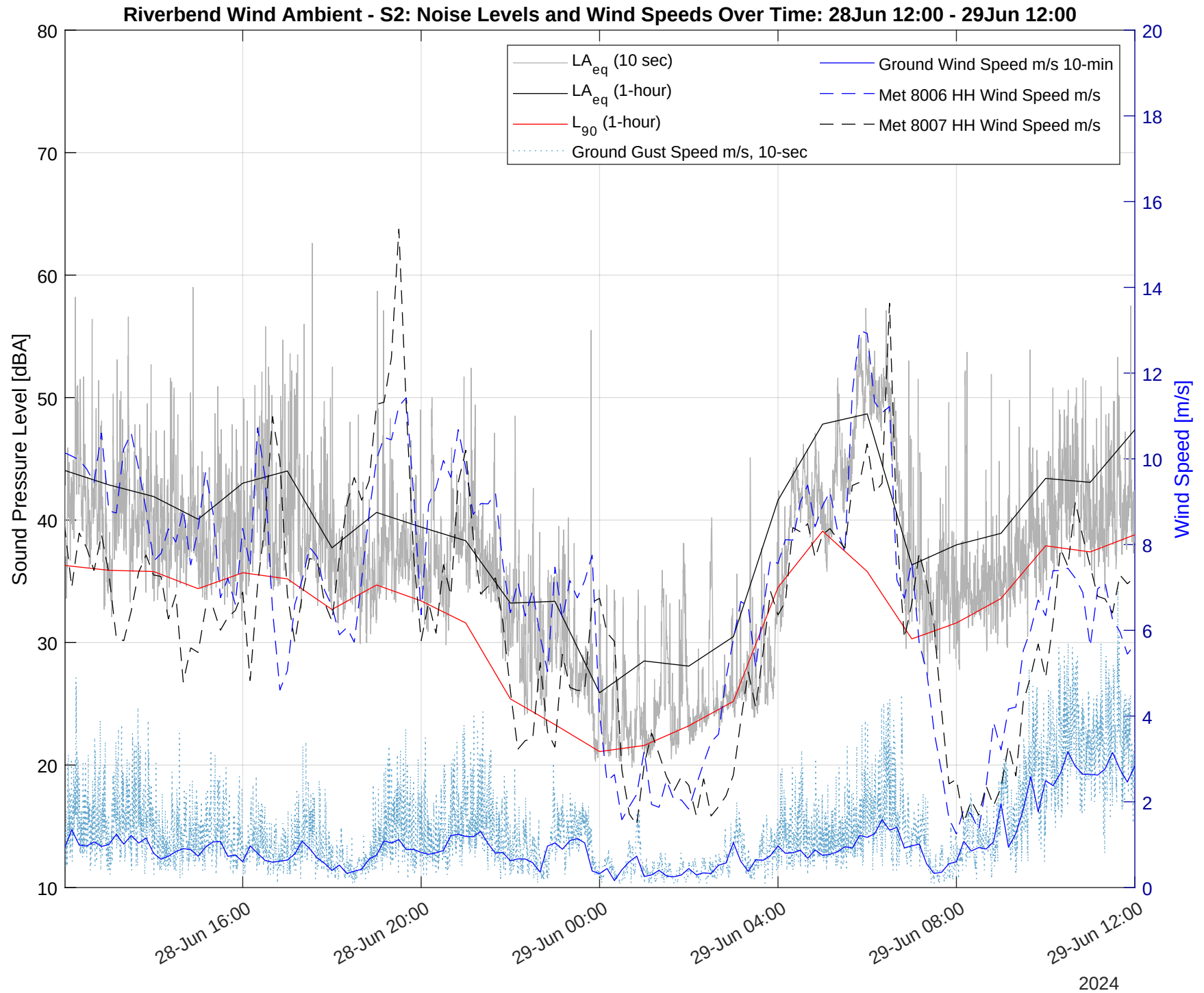


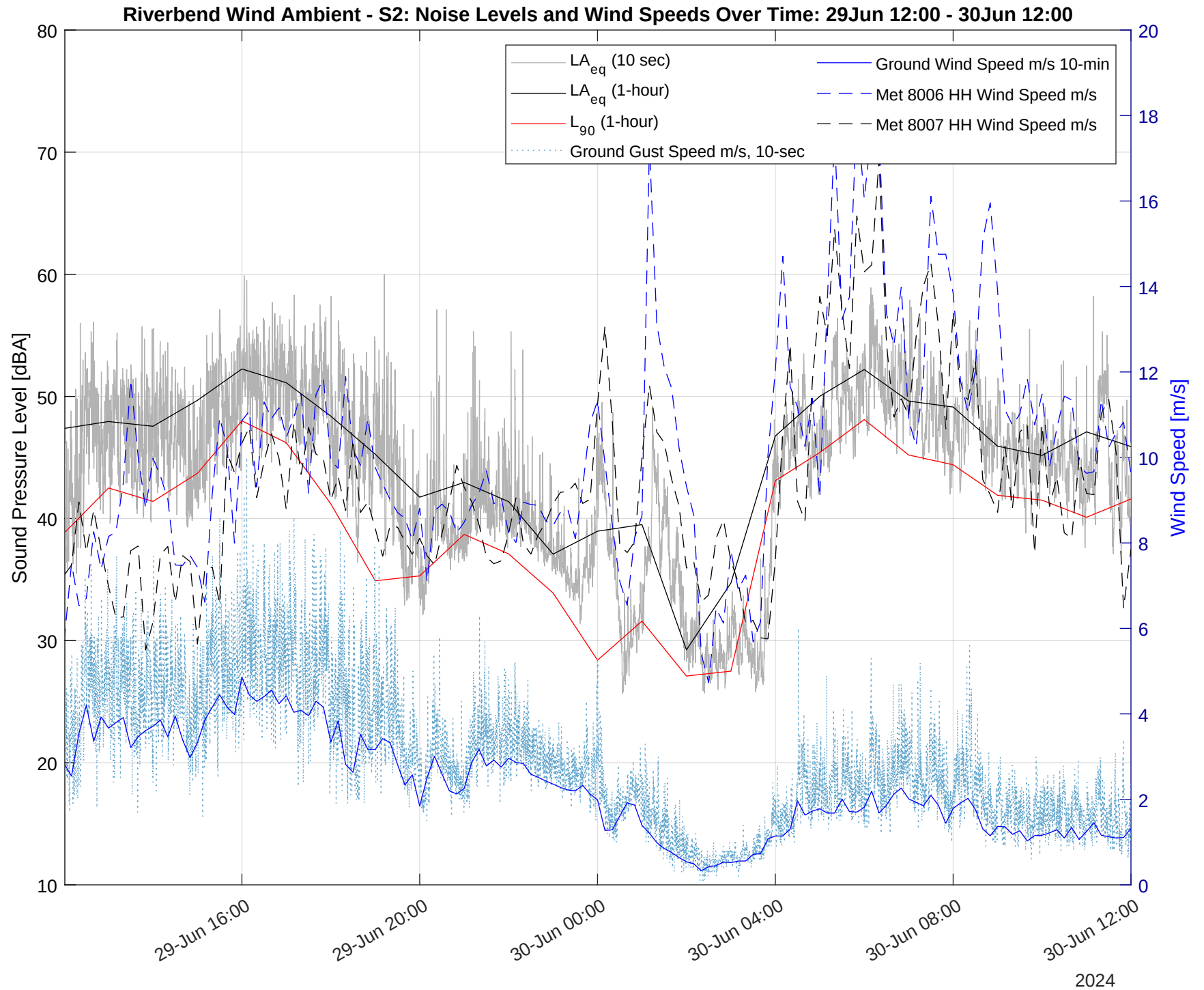


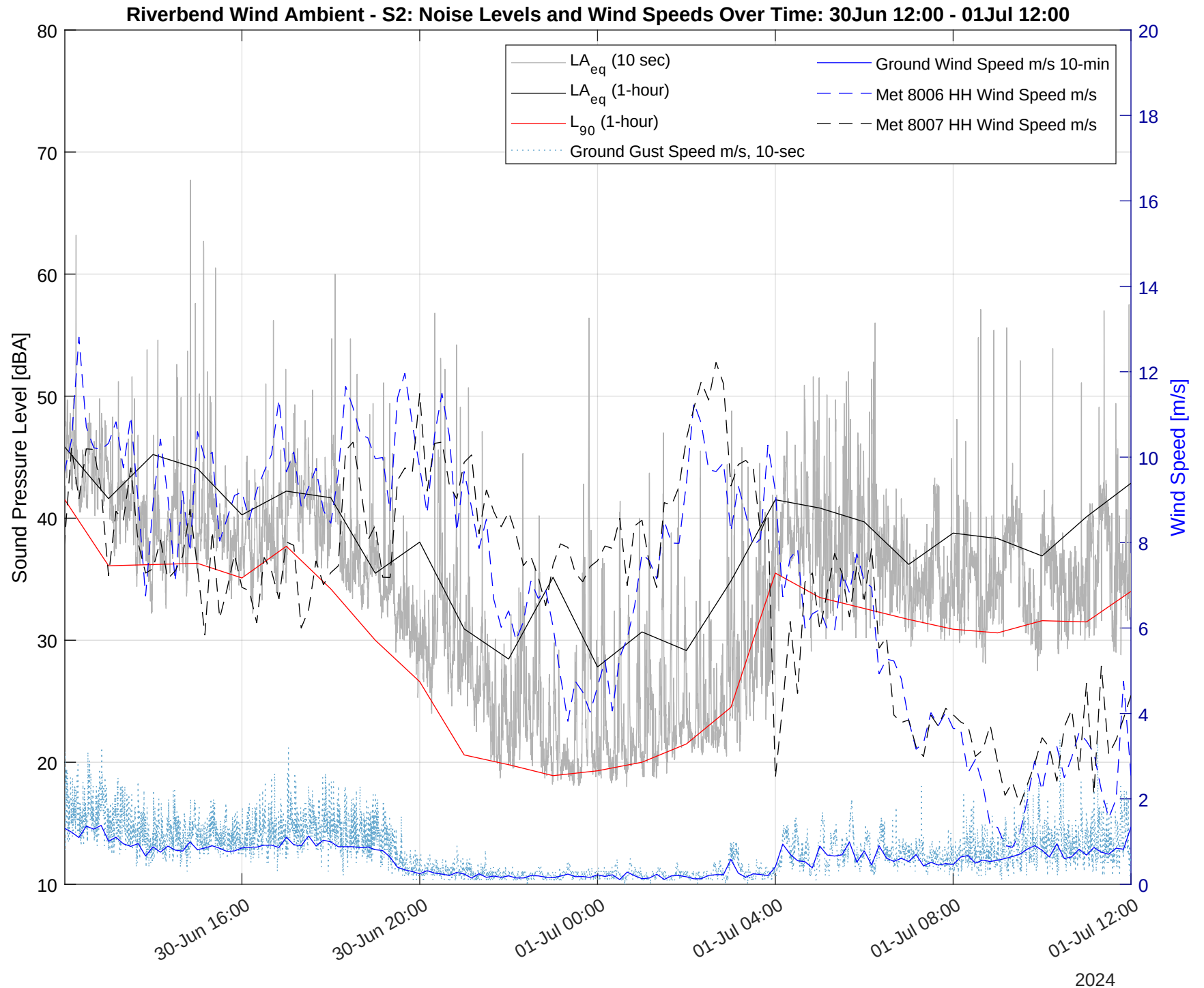


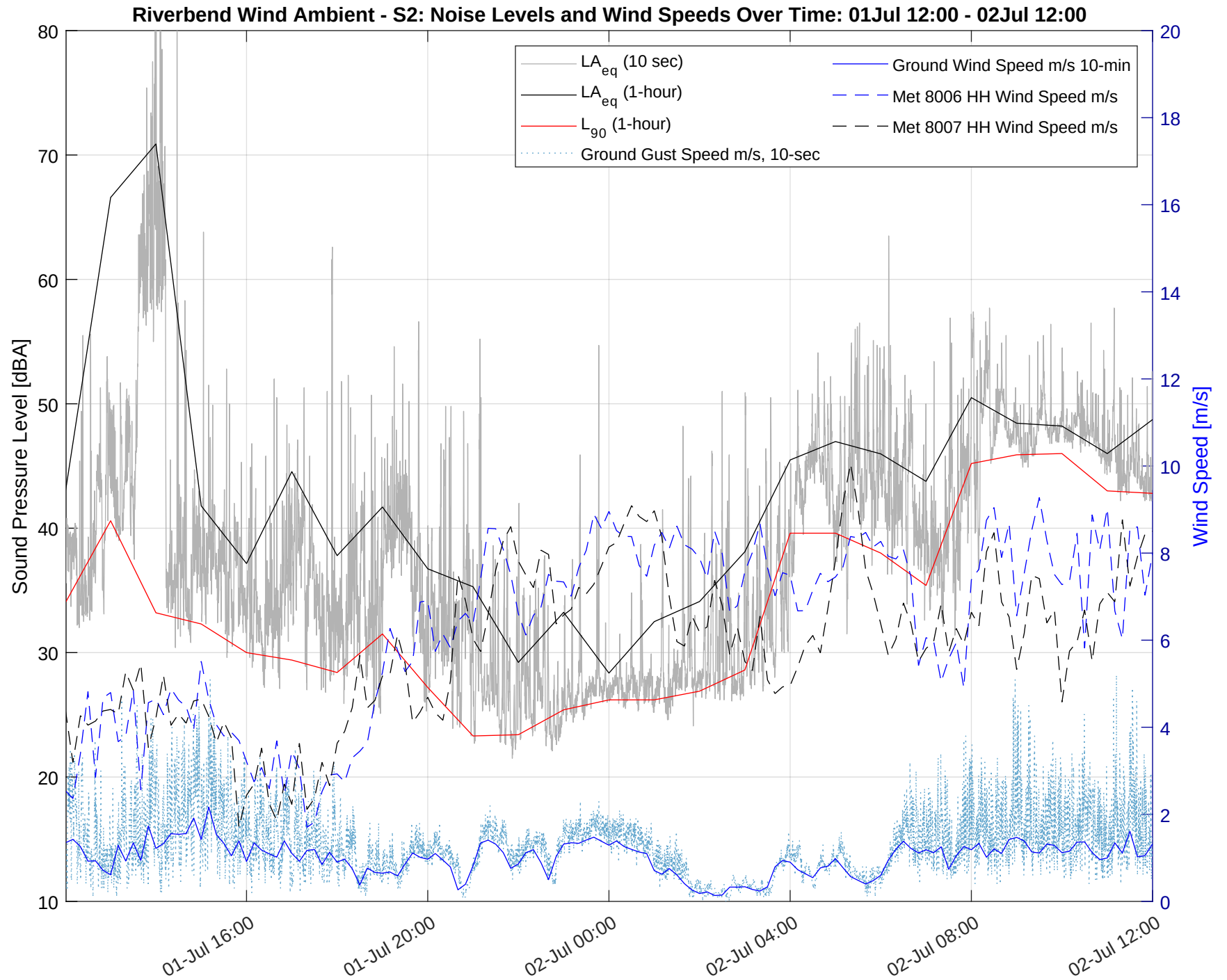


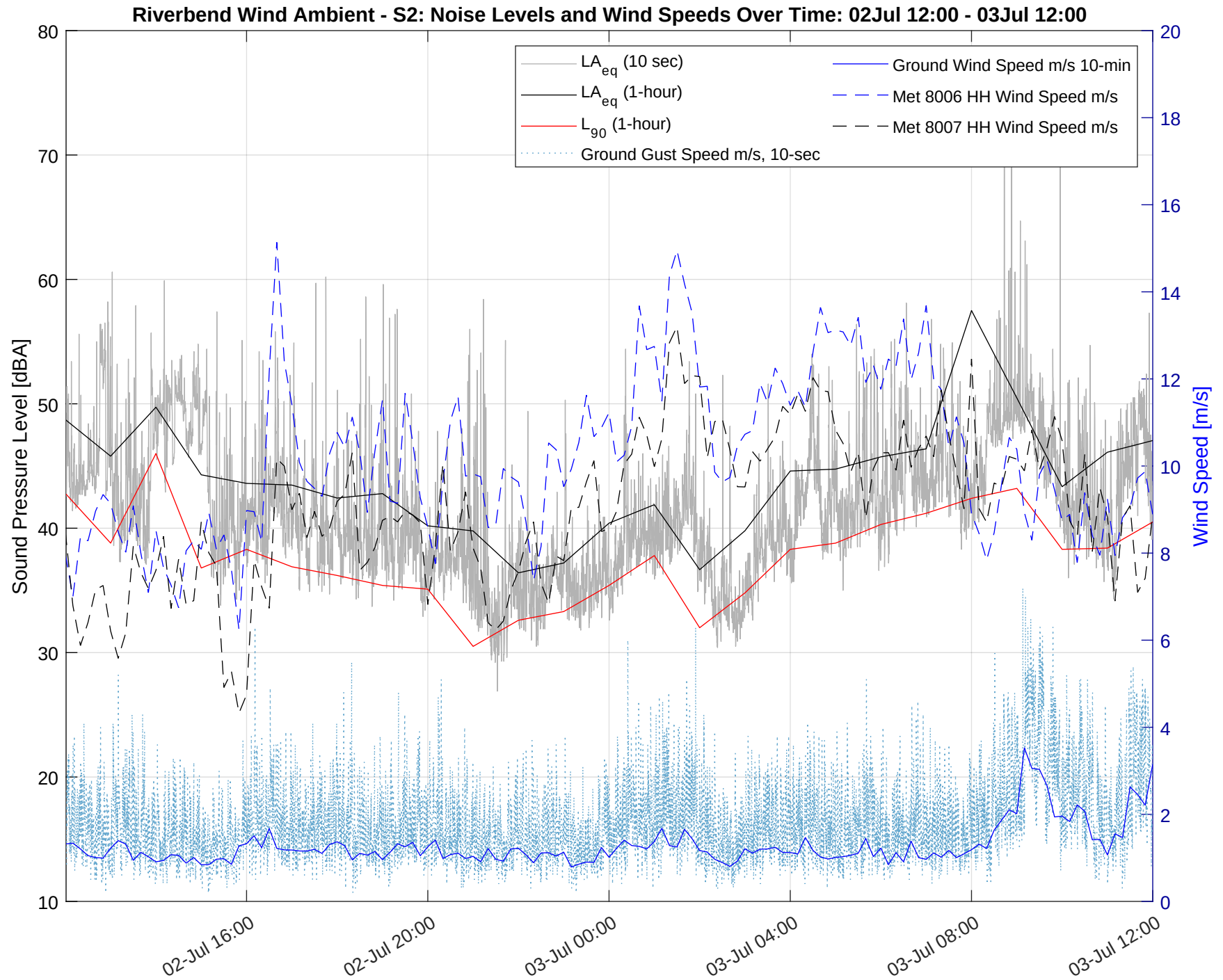


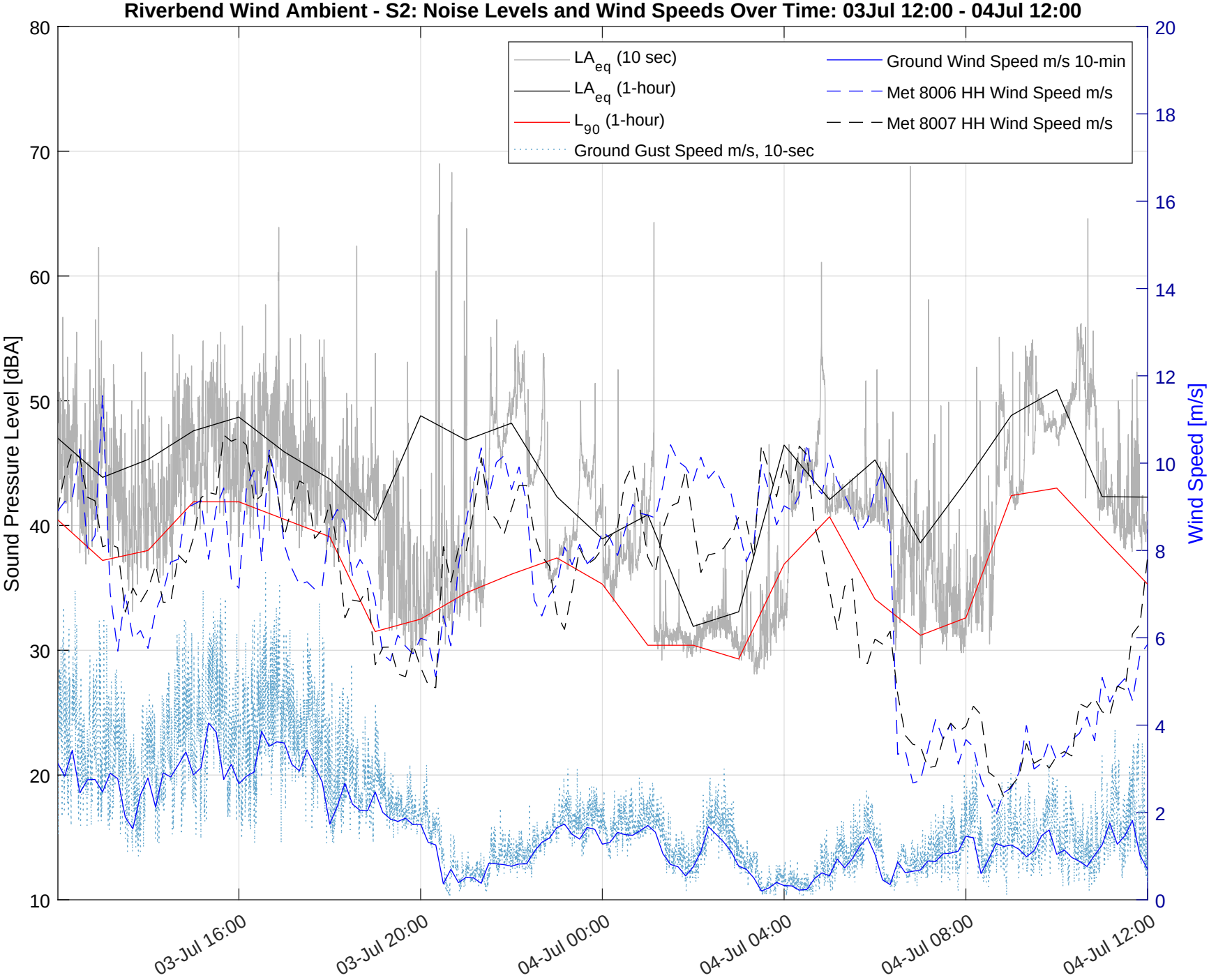


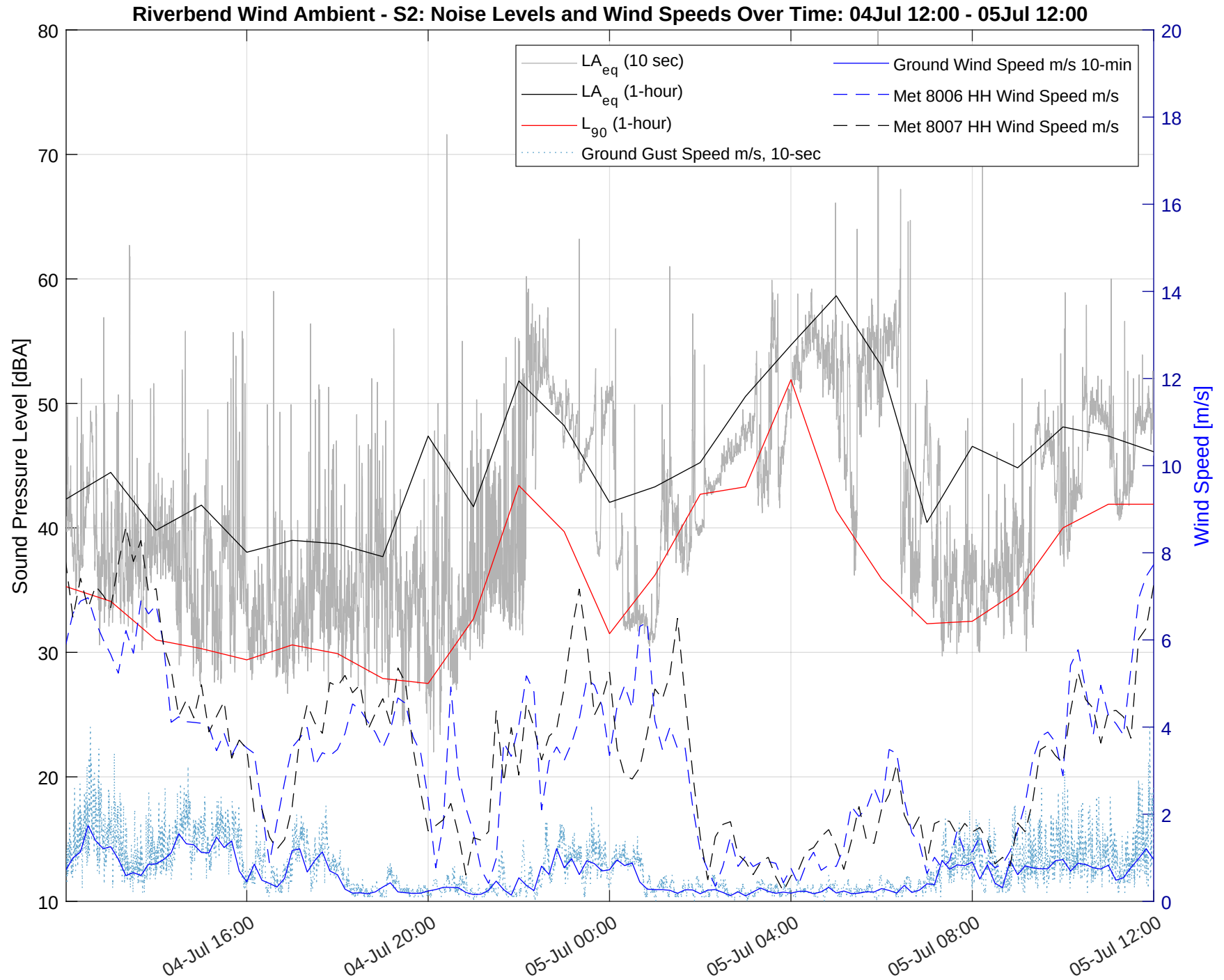


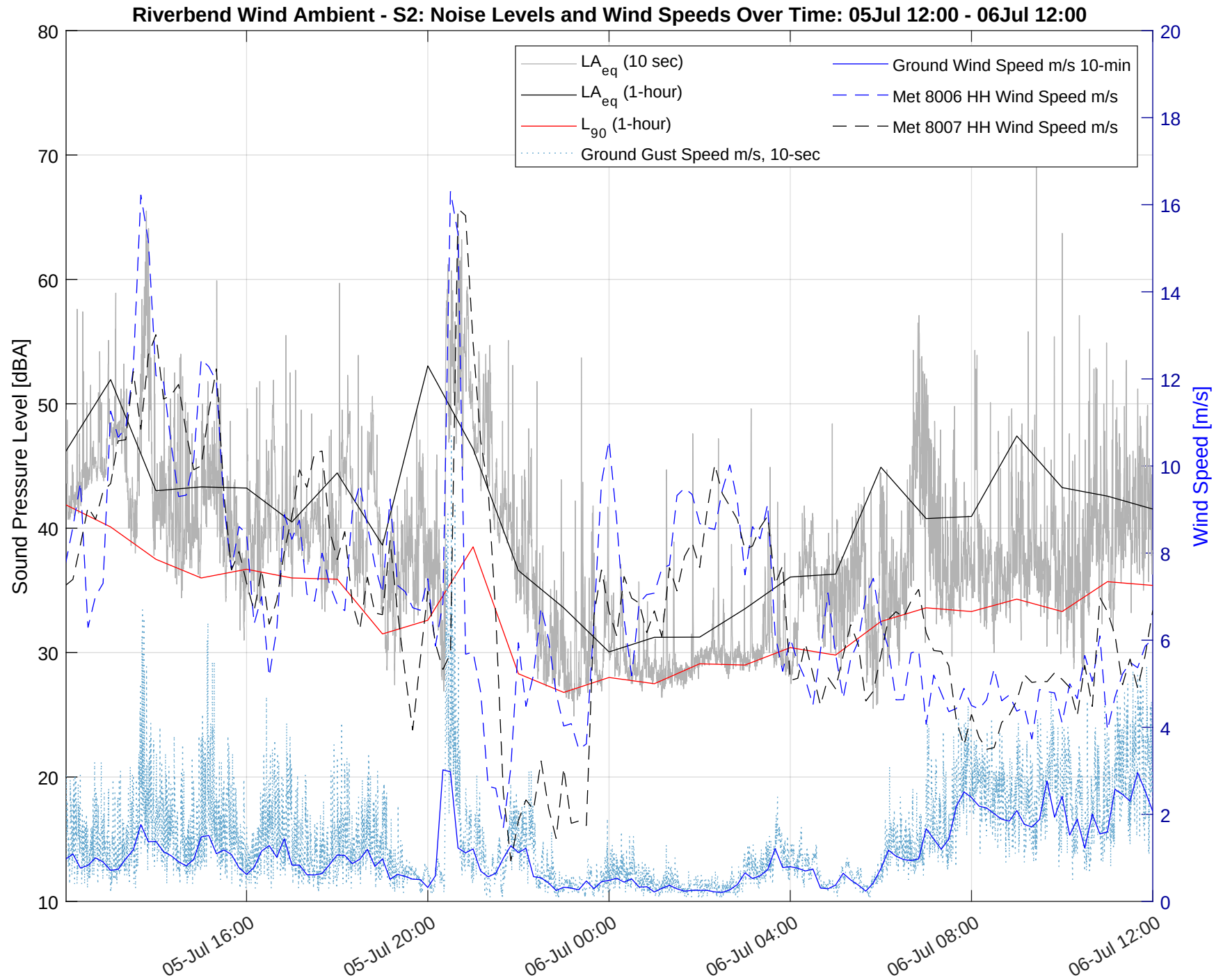


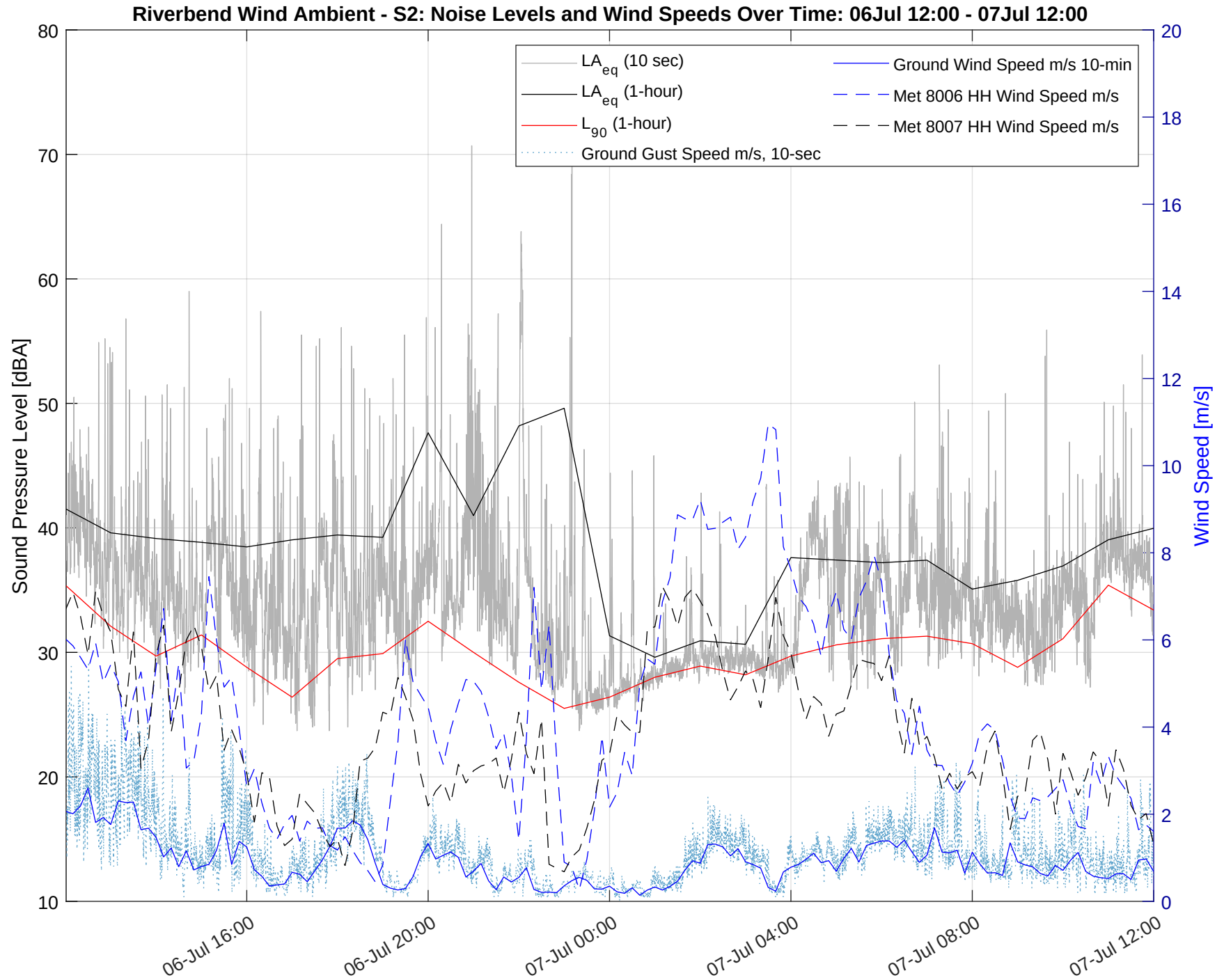


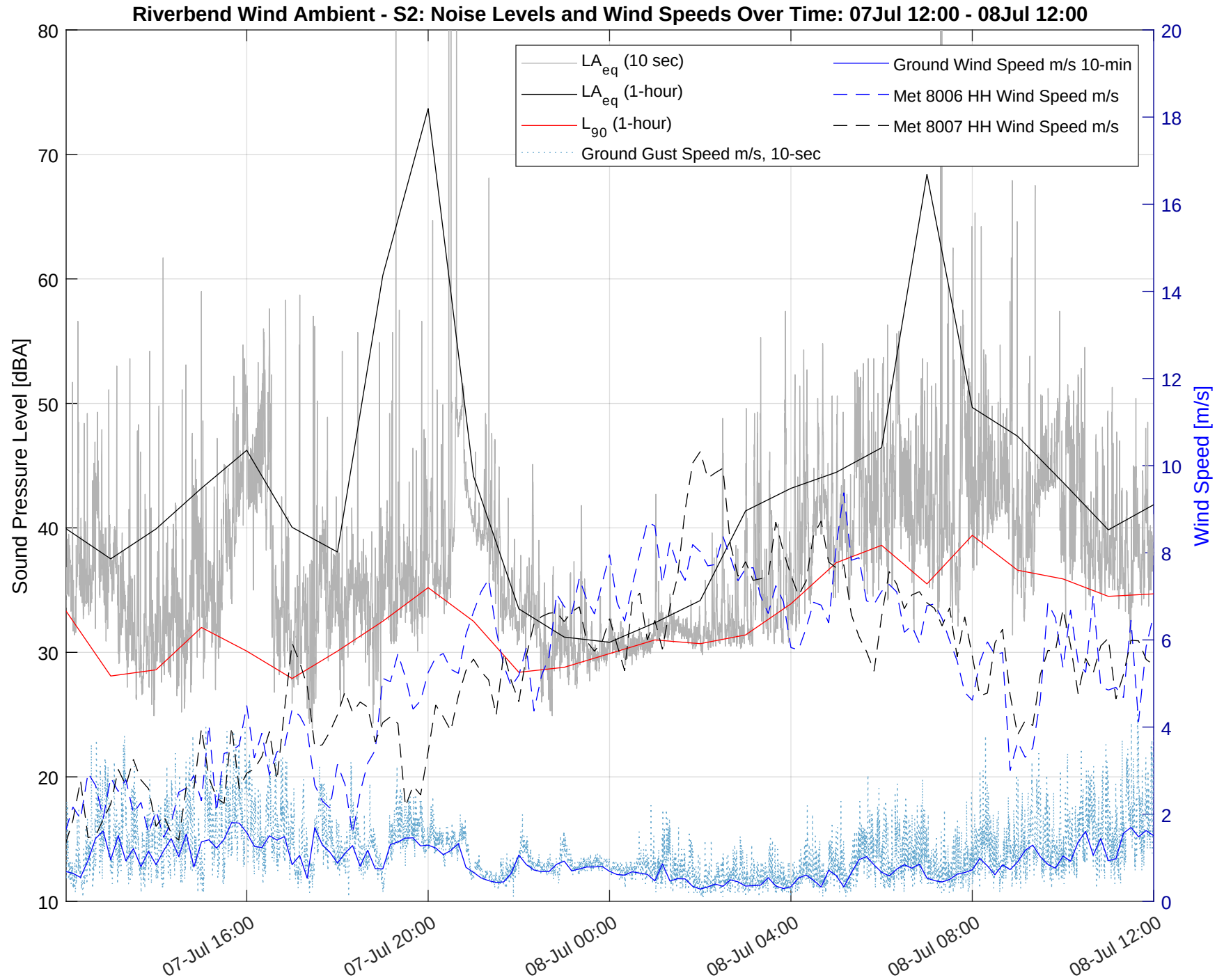


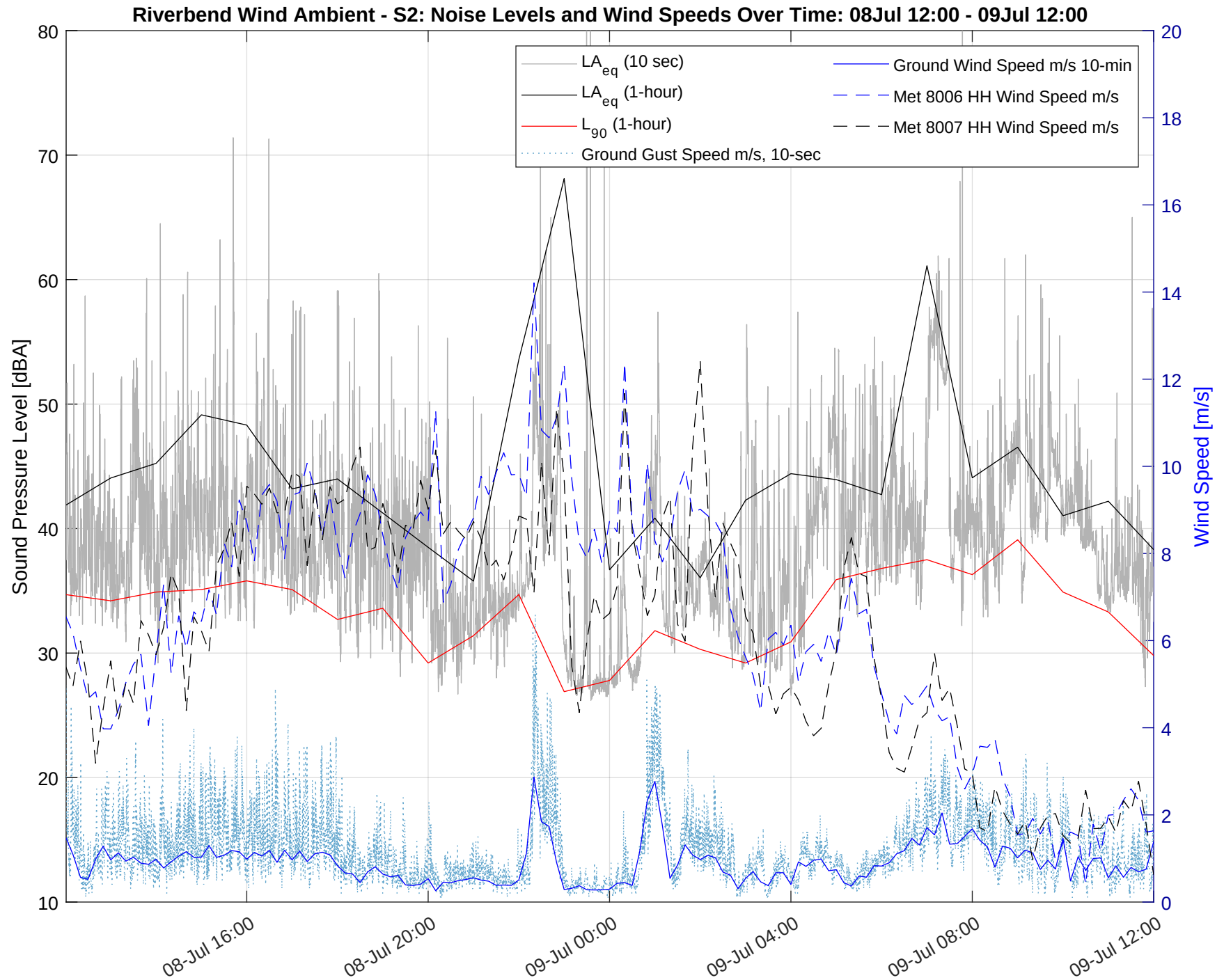


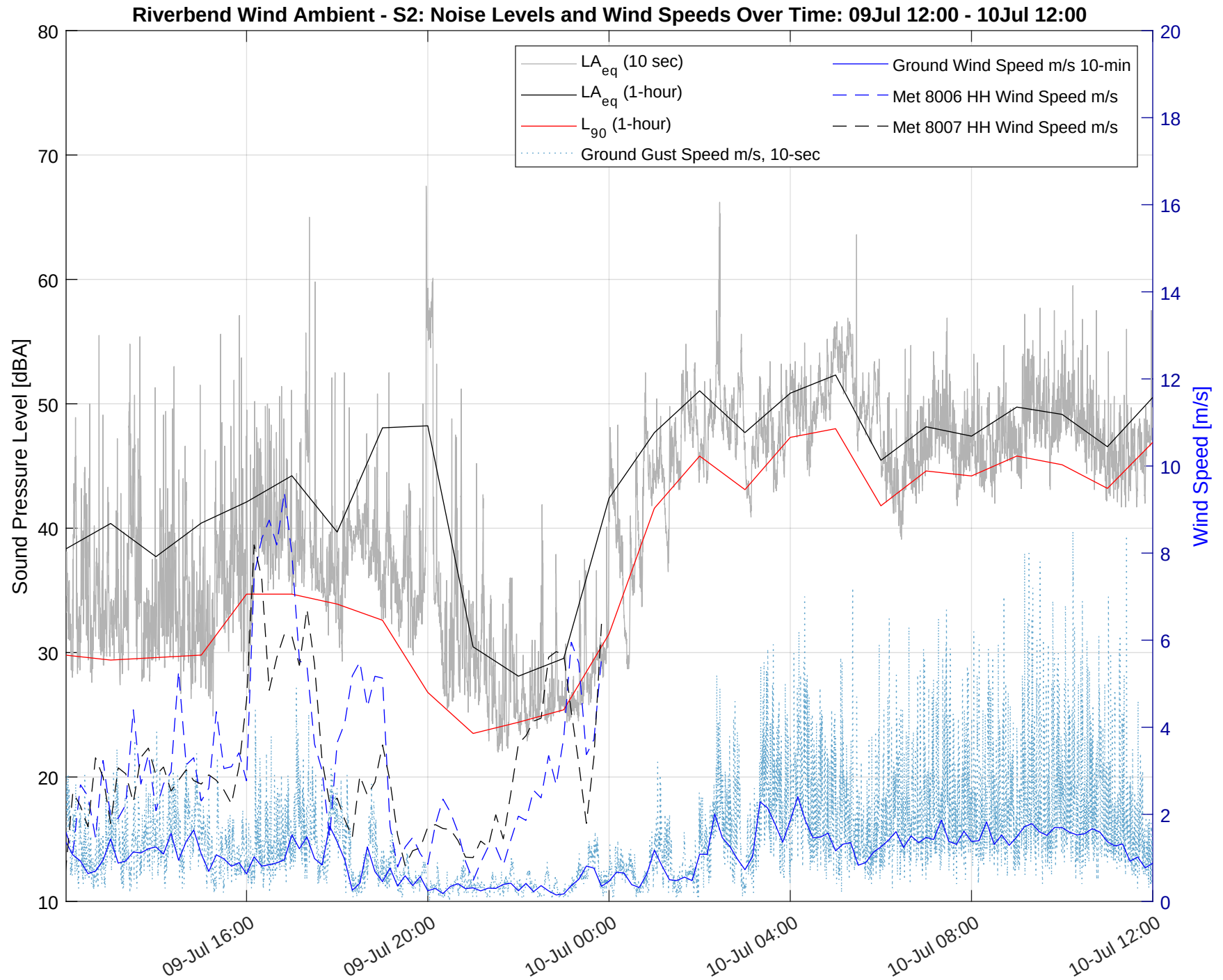


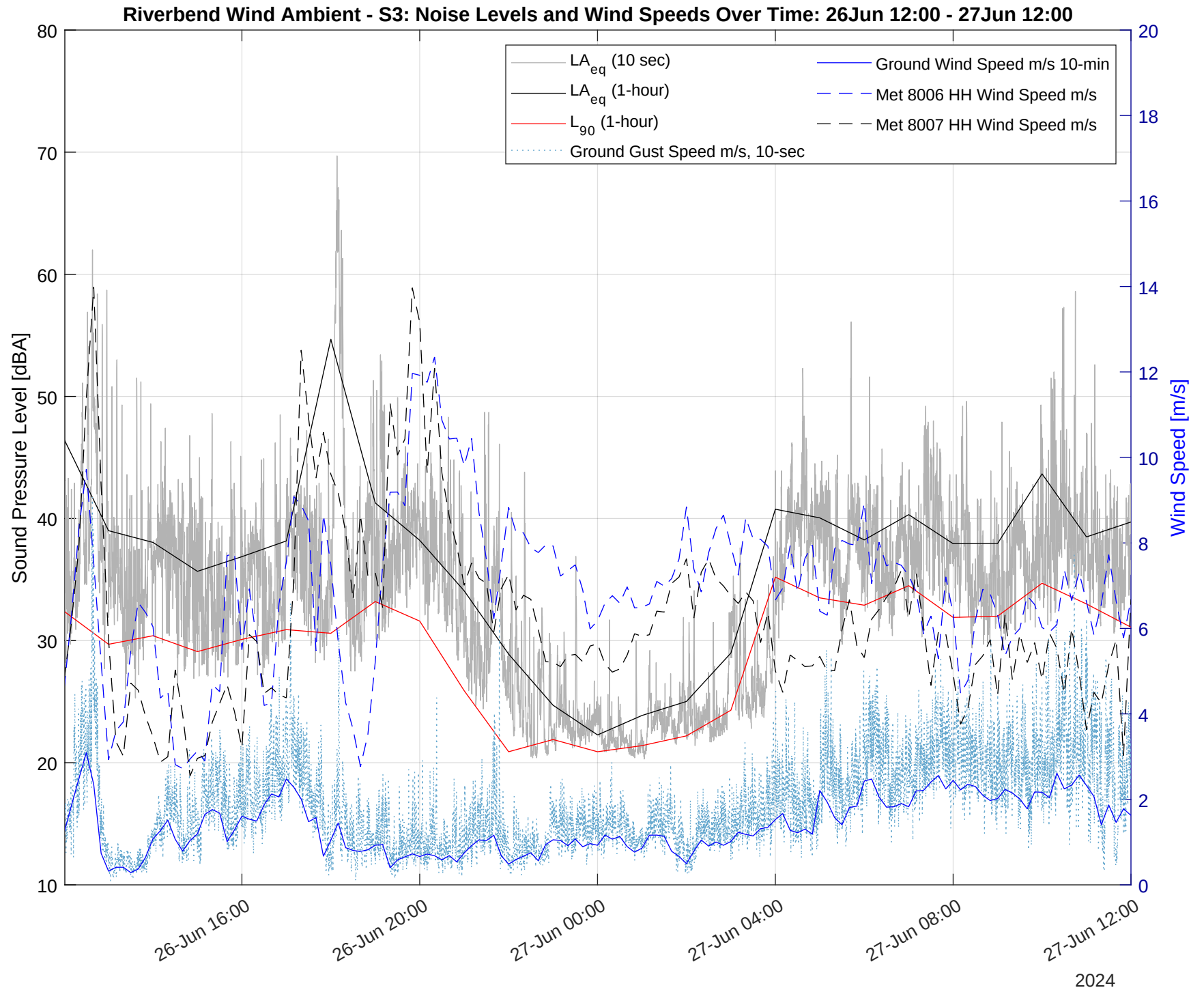


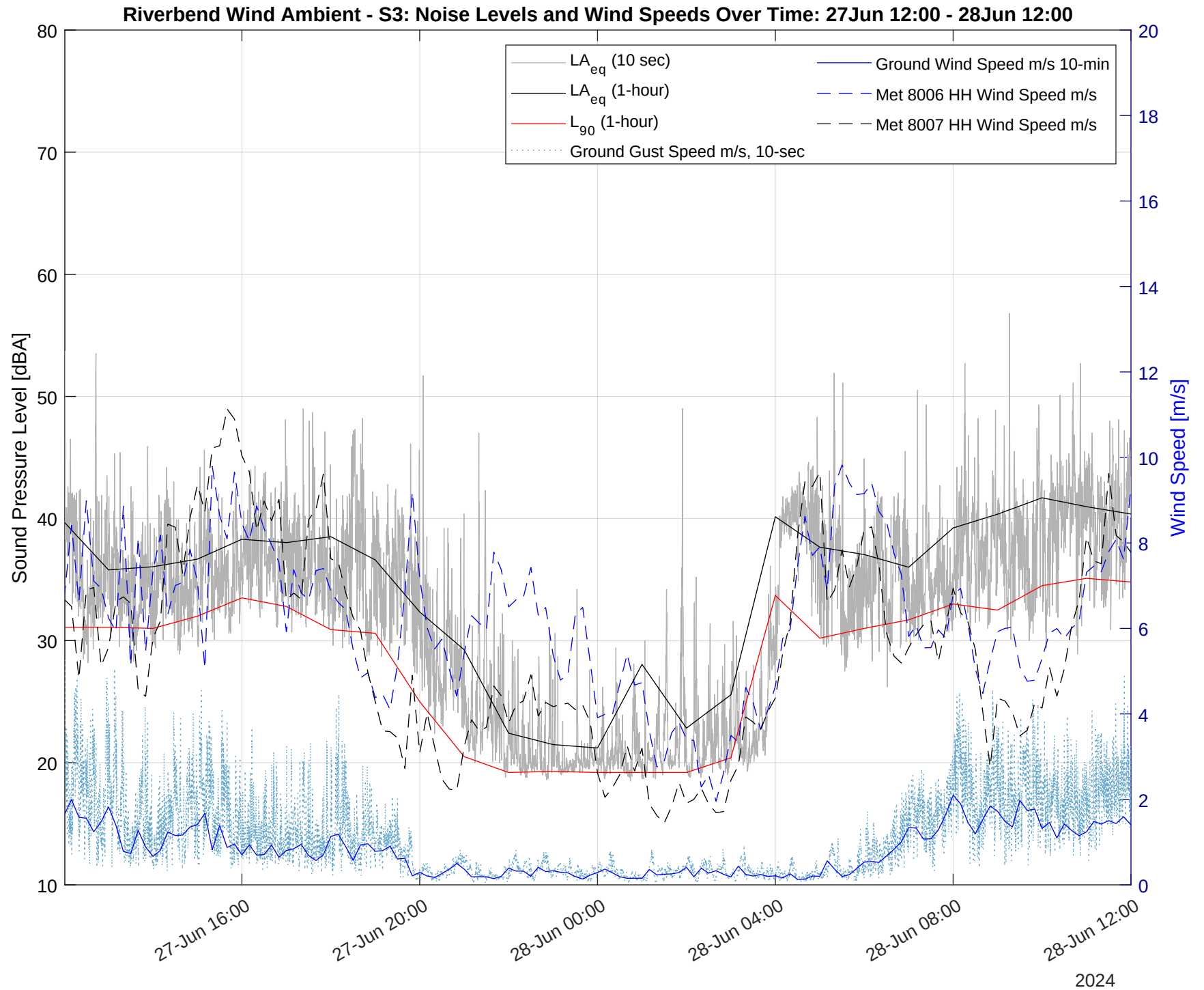


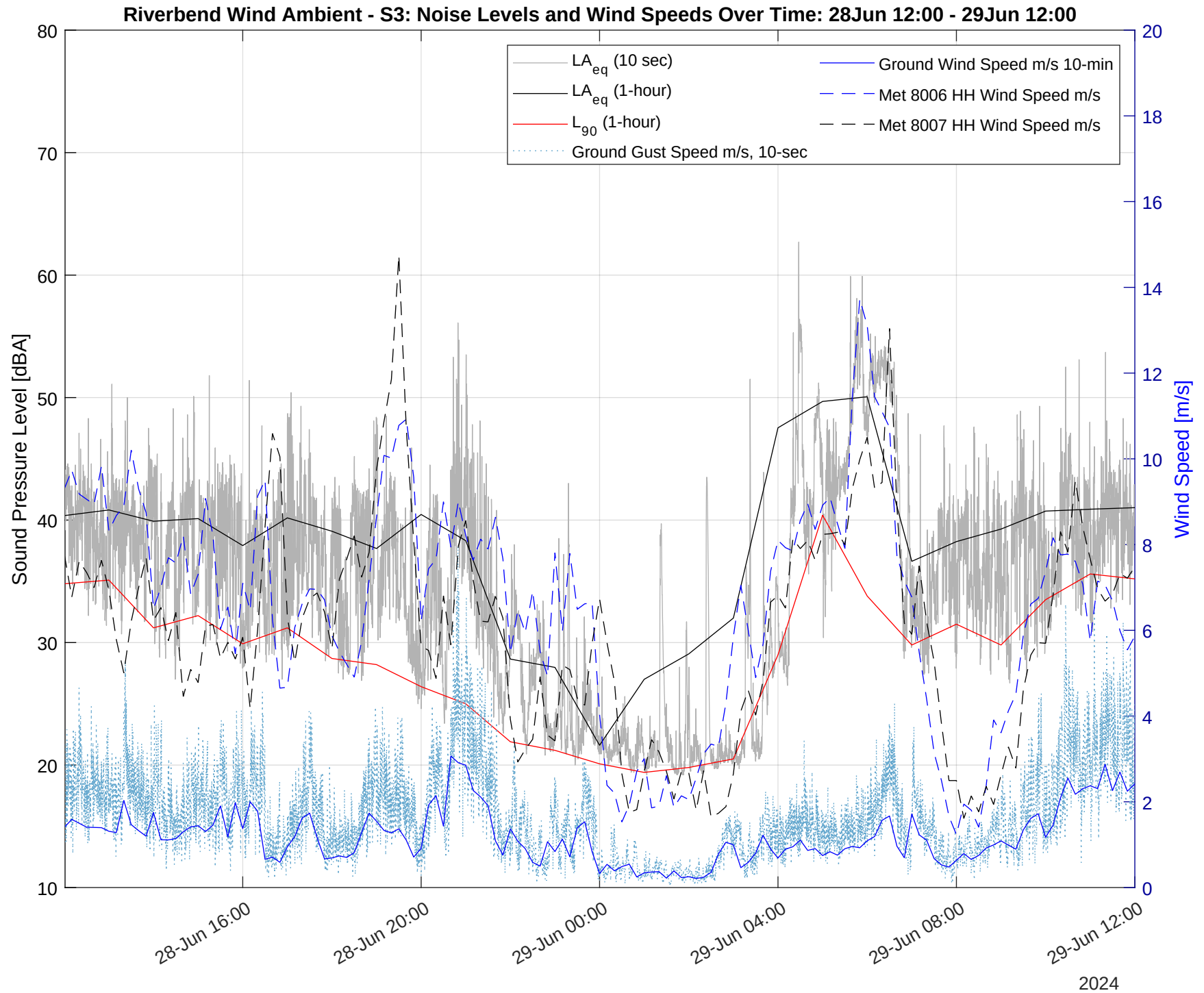


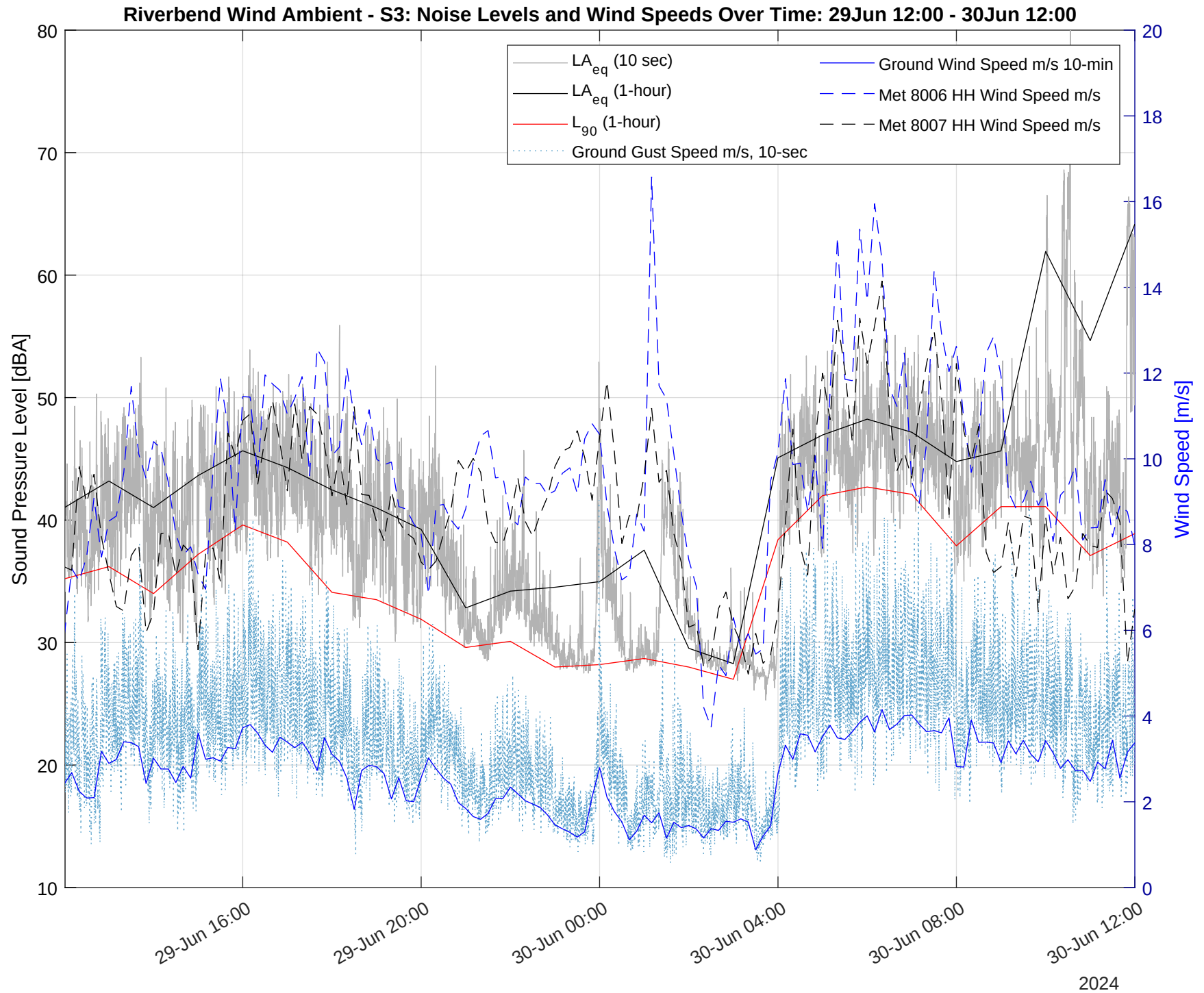


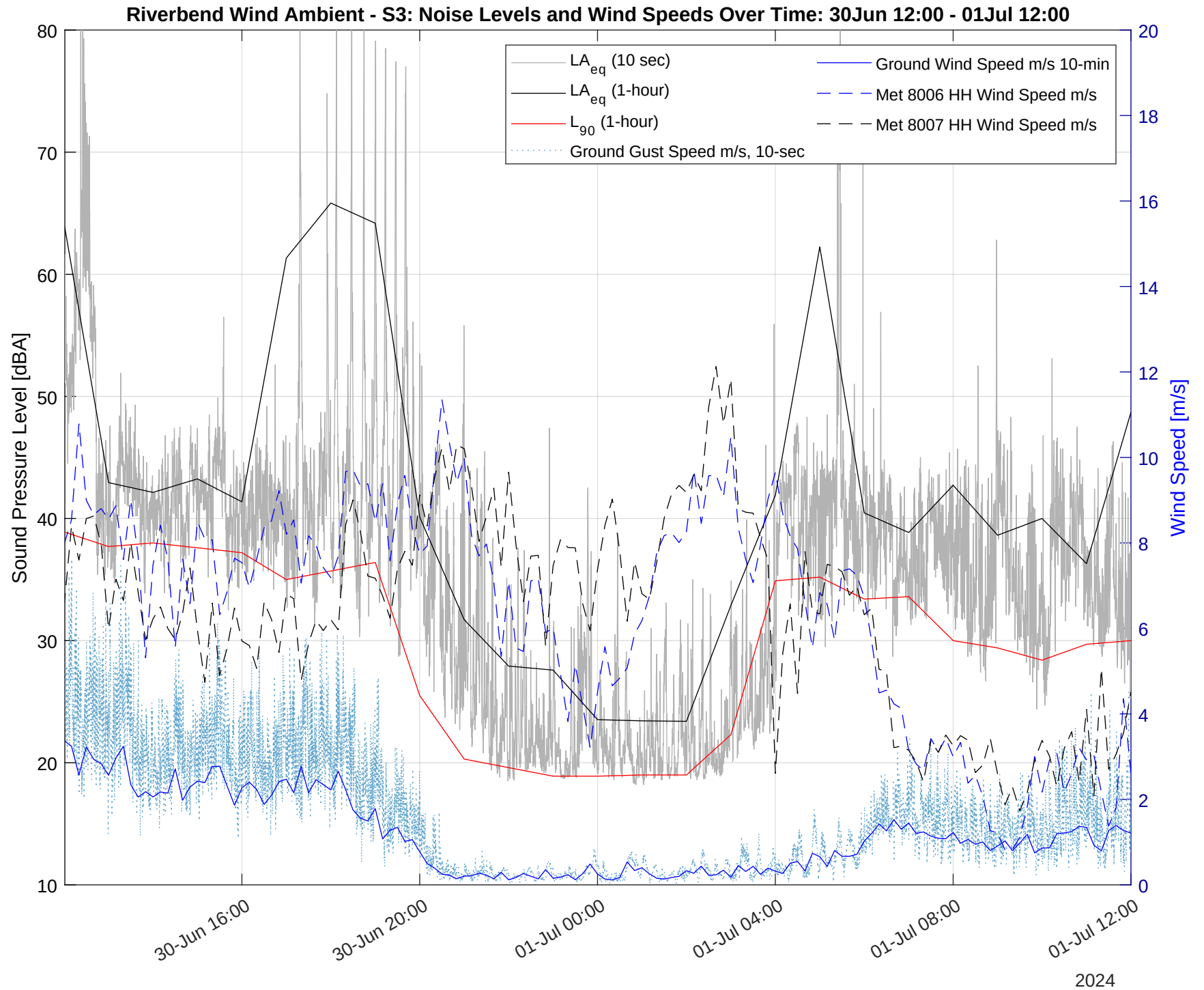


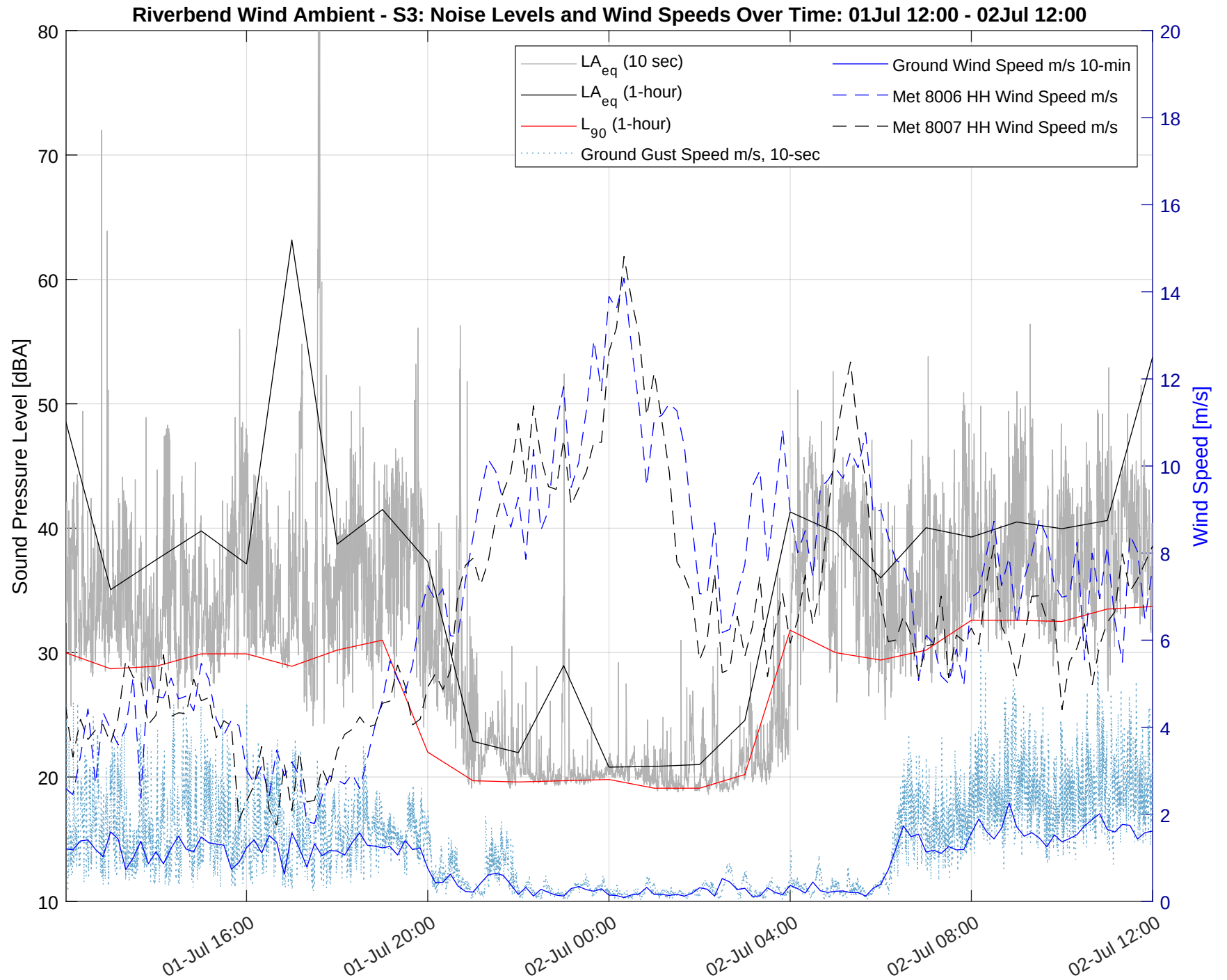


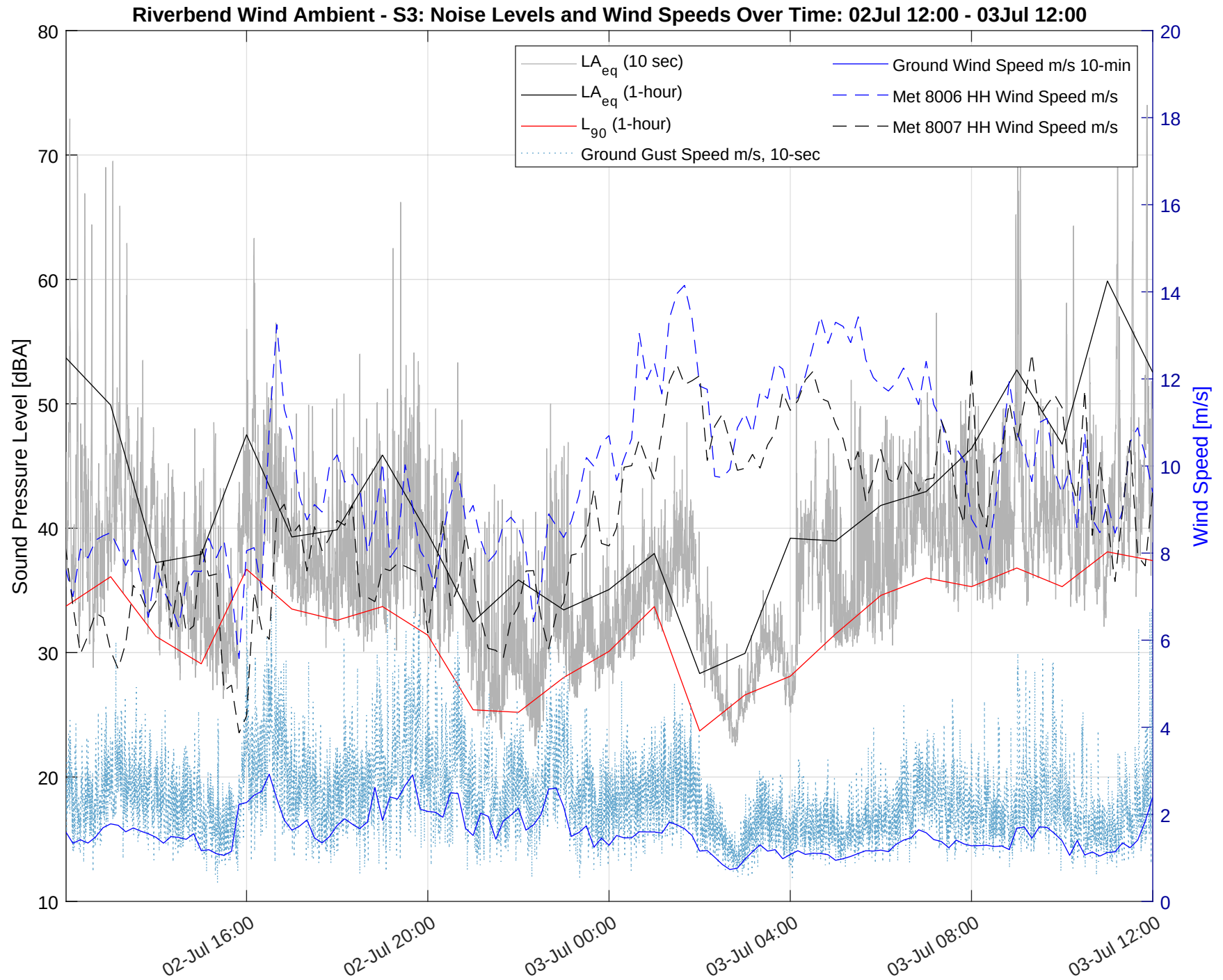


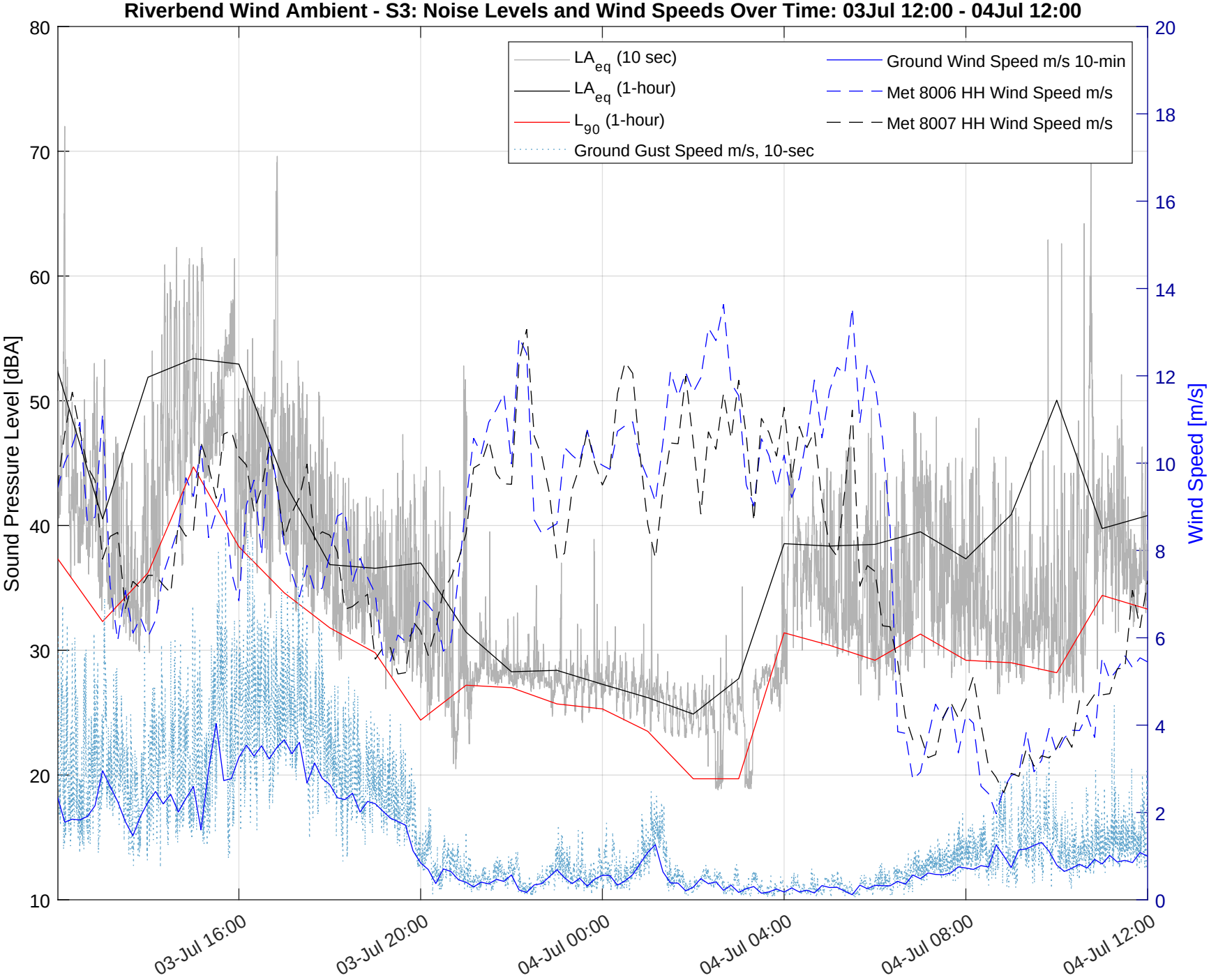


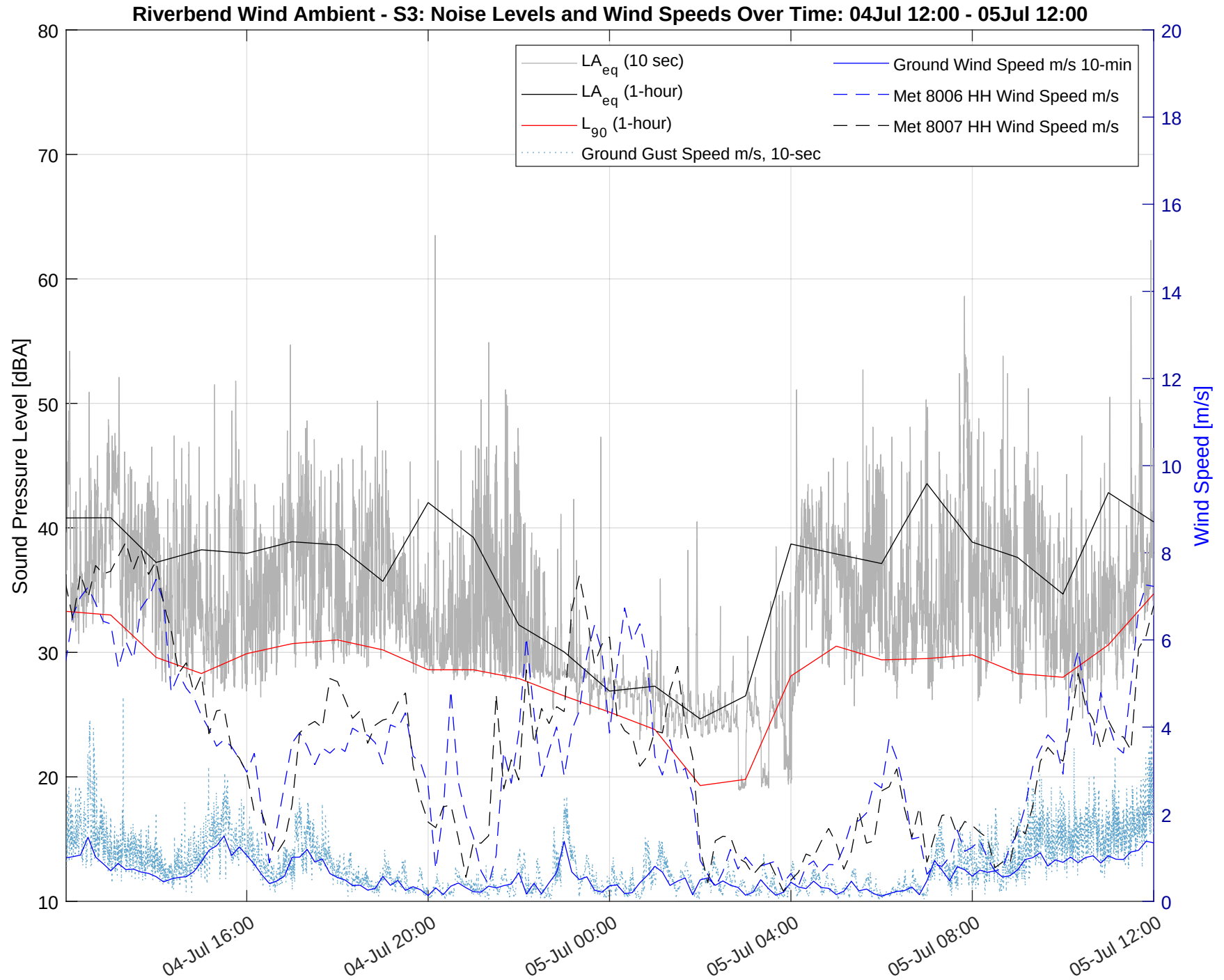


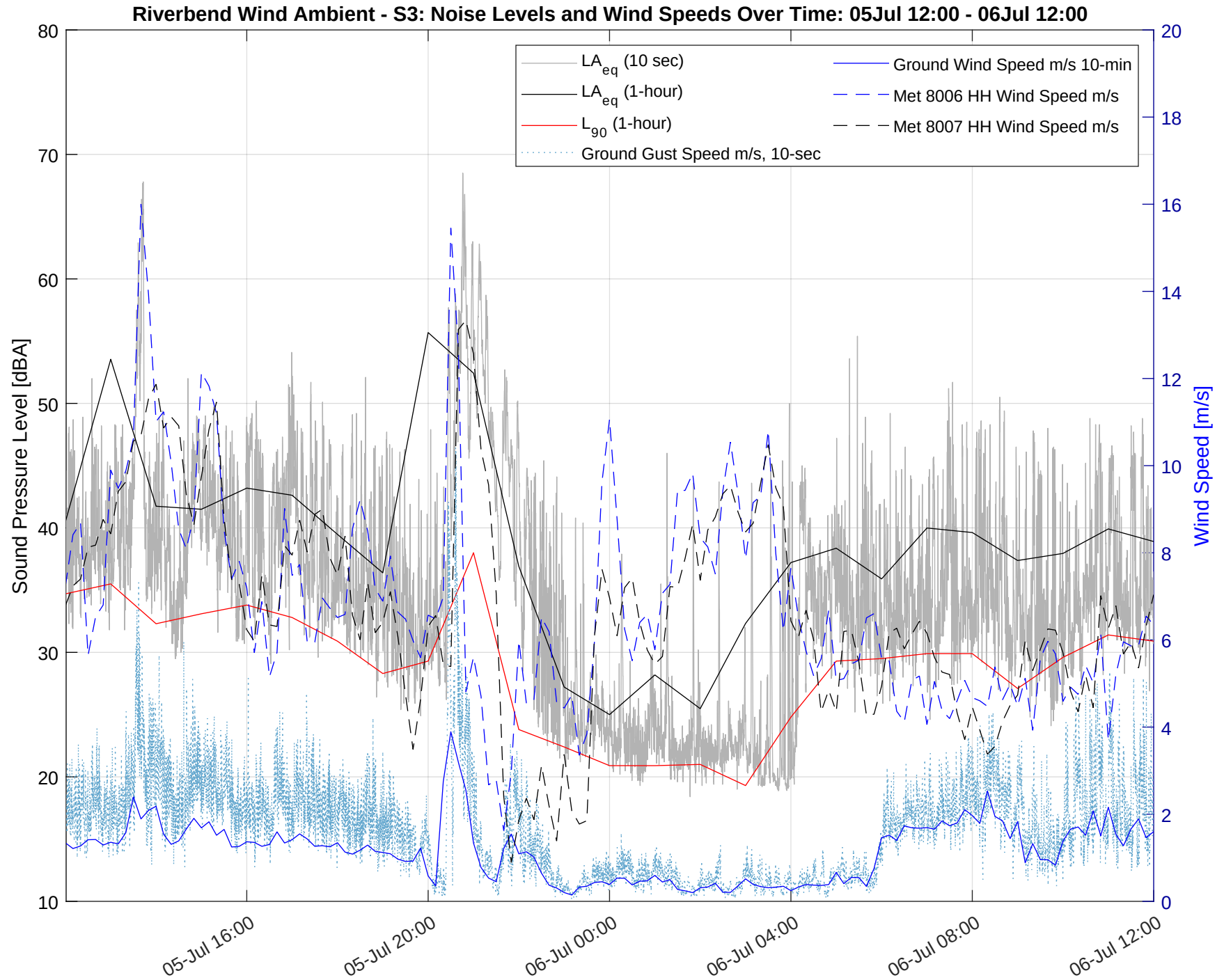


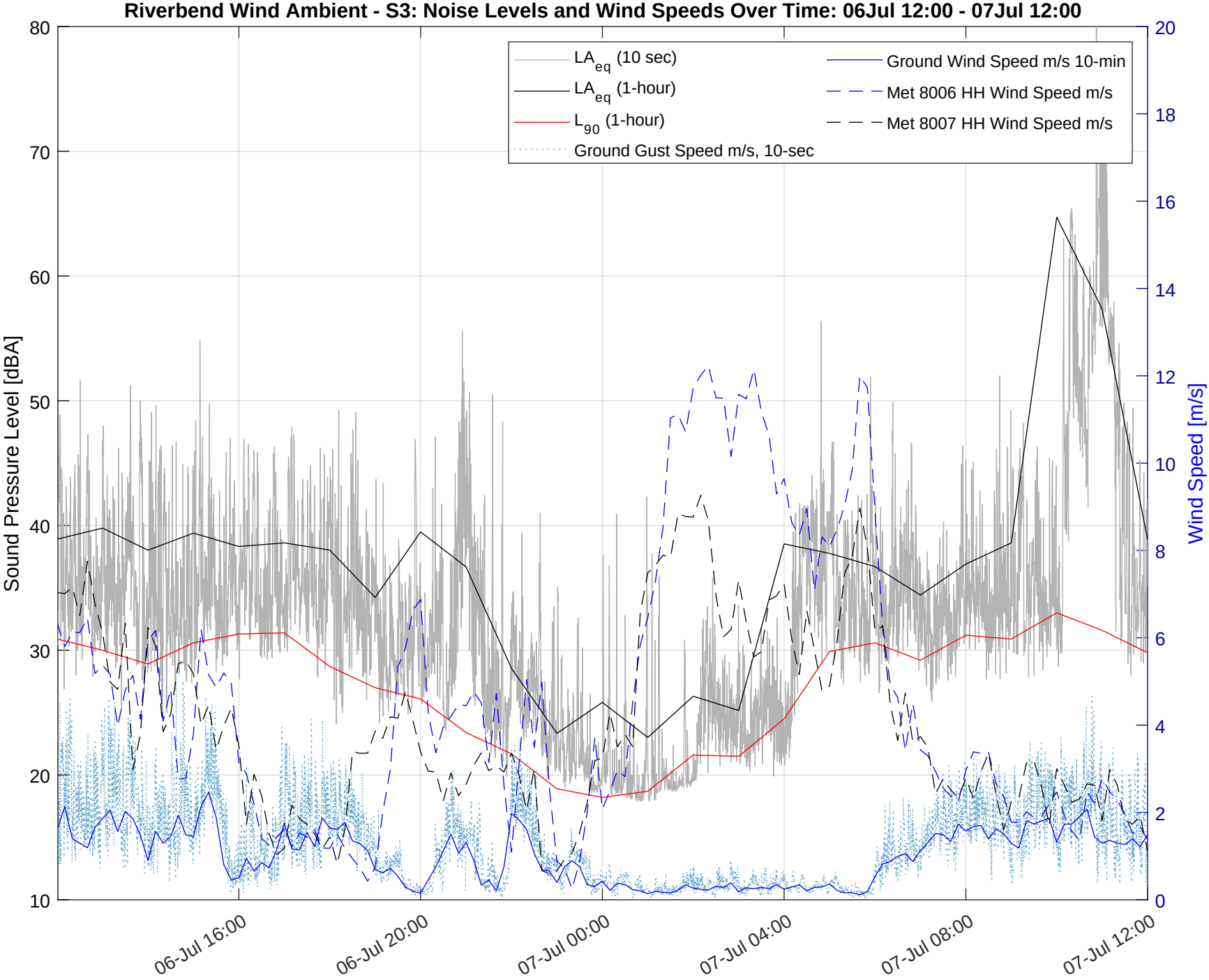


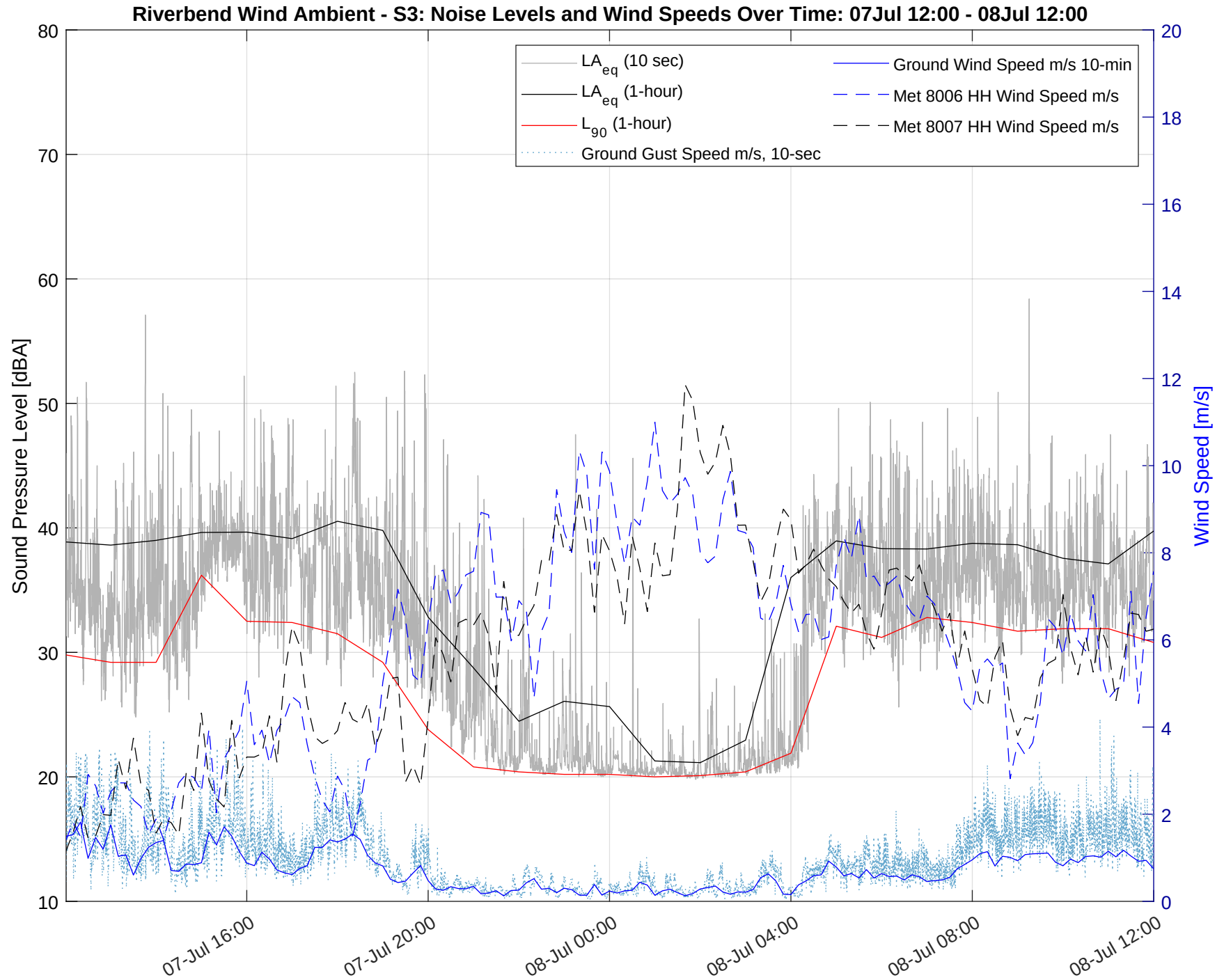


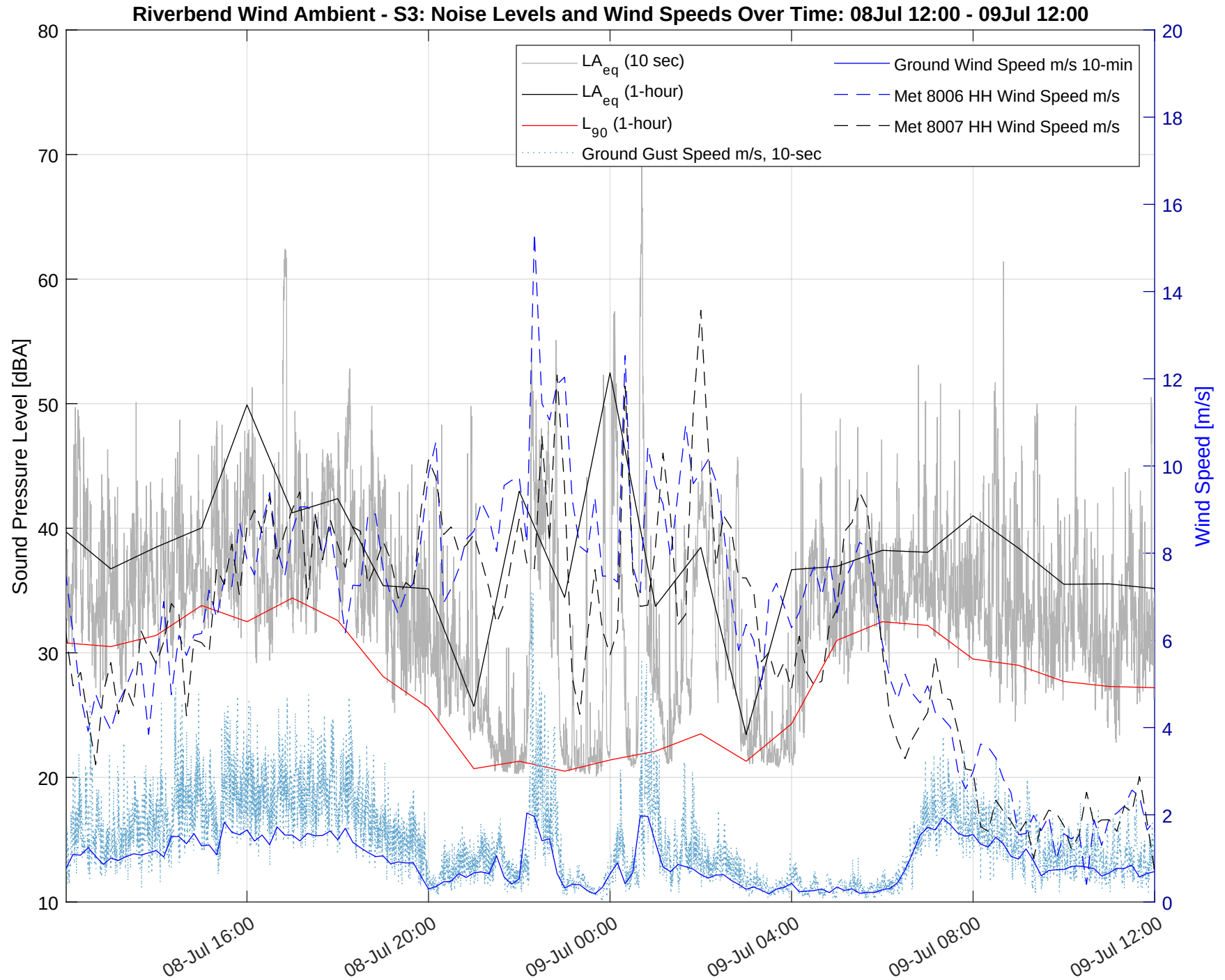


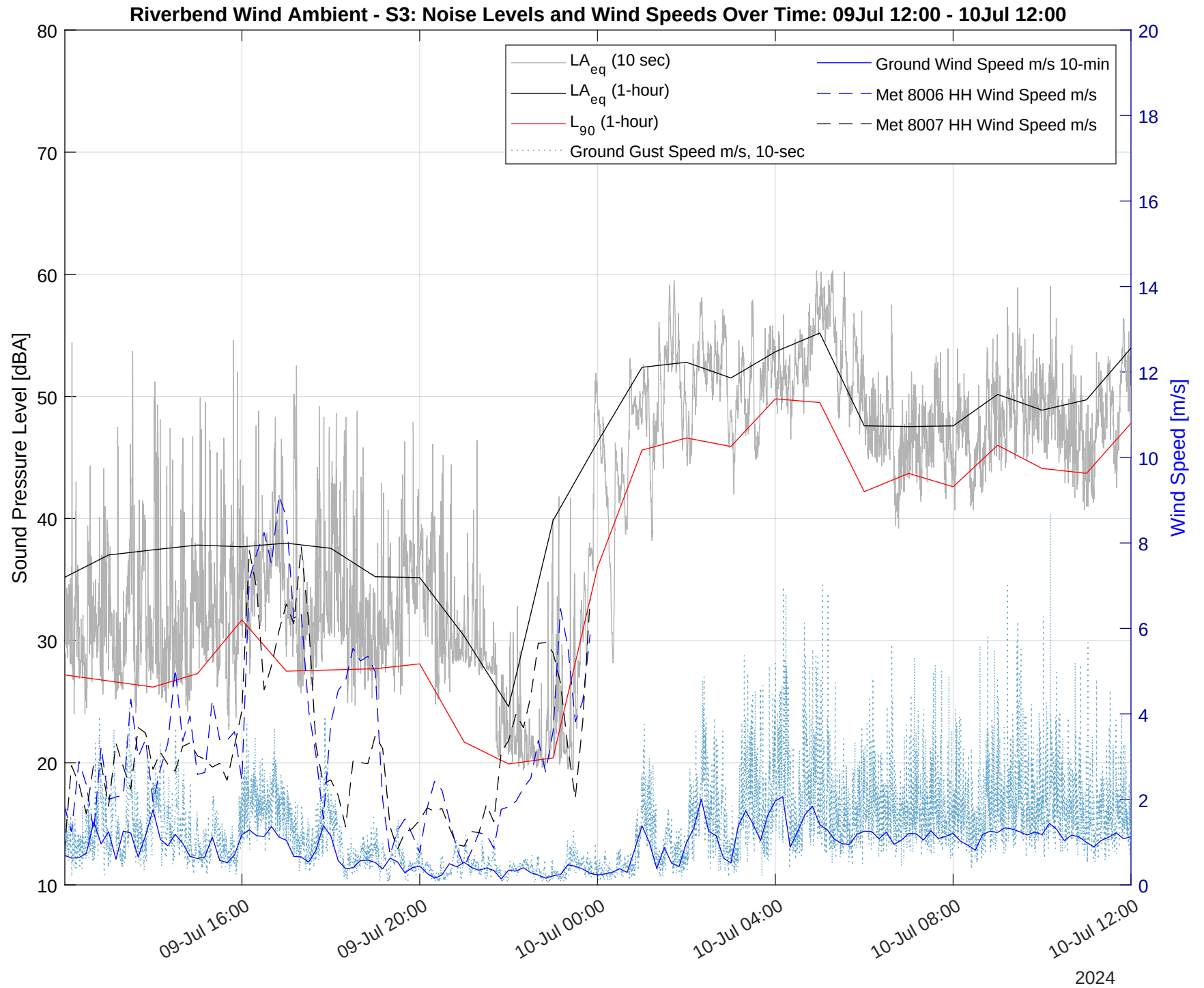












Detailed Maps and Photographs of Measurement Locations

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

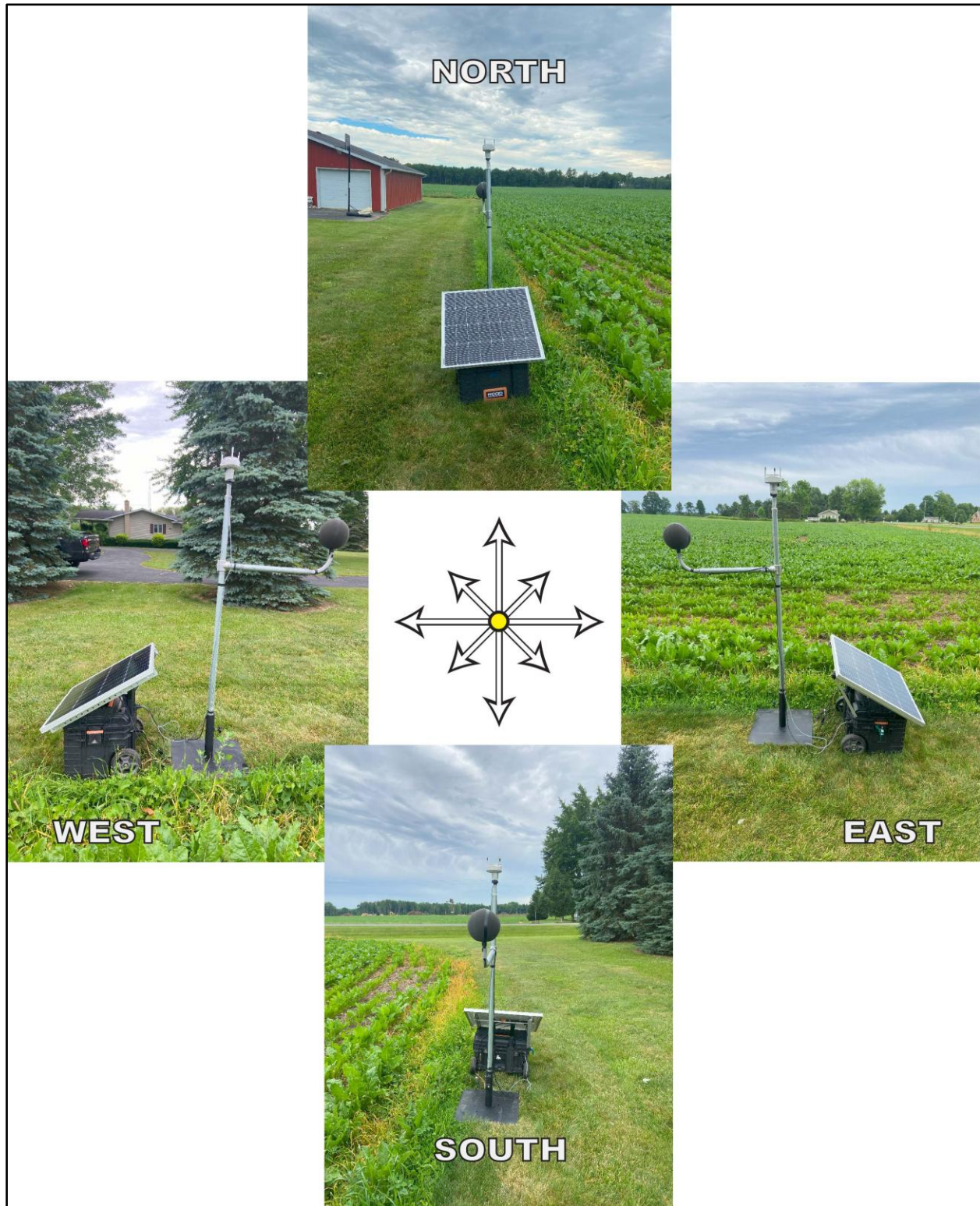


Figure D-4. Photographs of Location Fremont 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

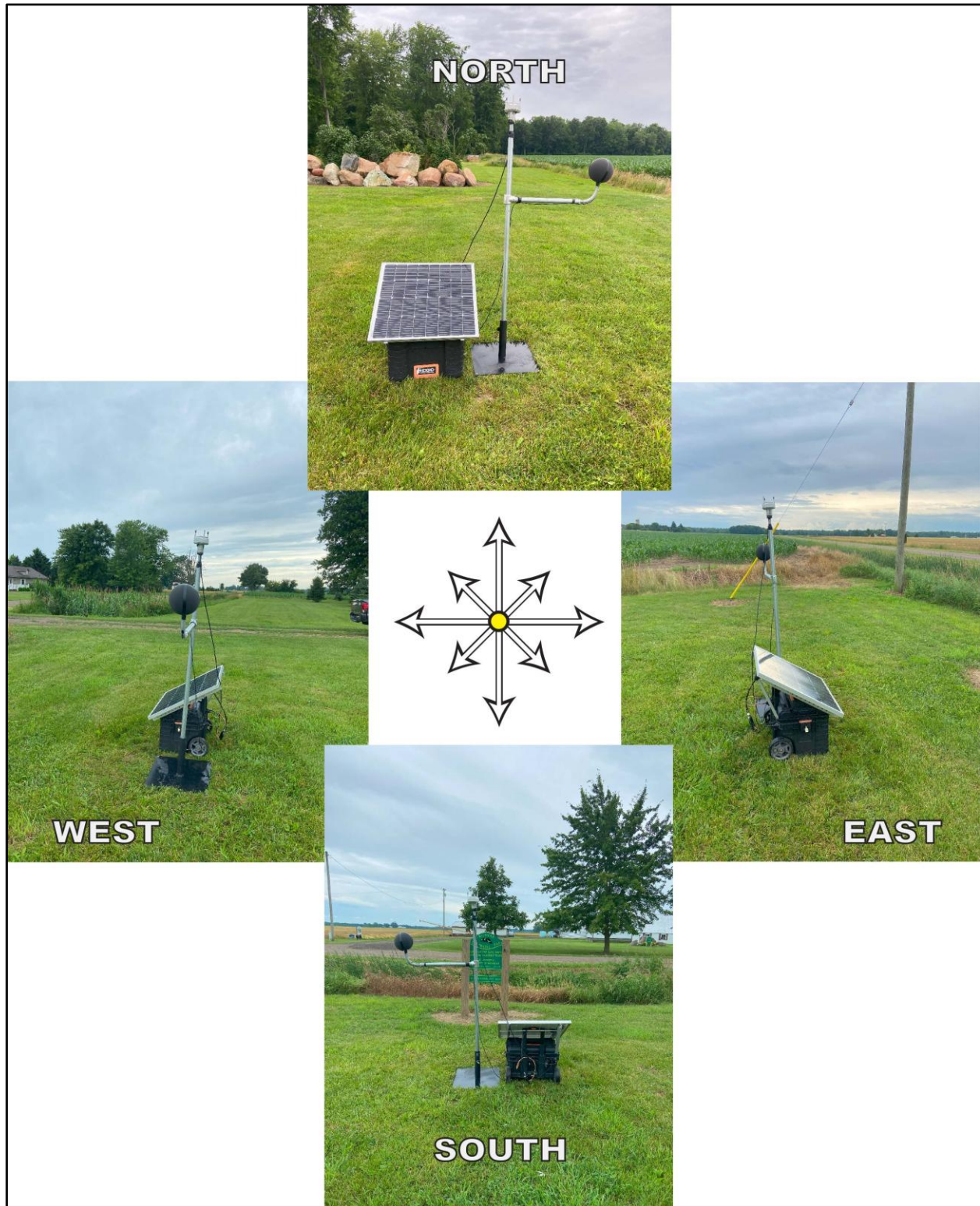


Figure D-5. Photographs of Location Fremont 2

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

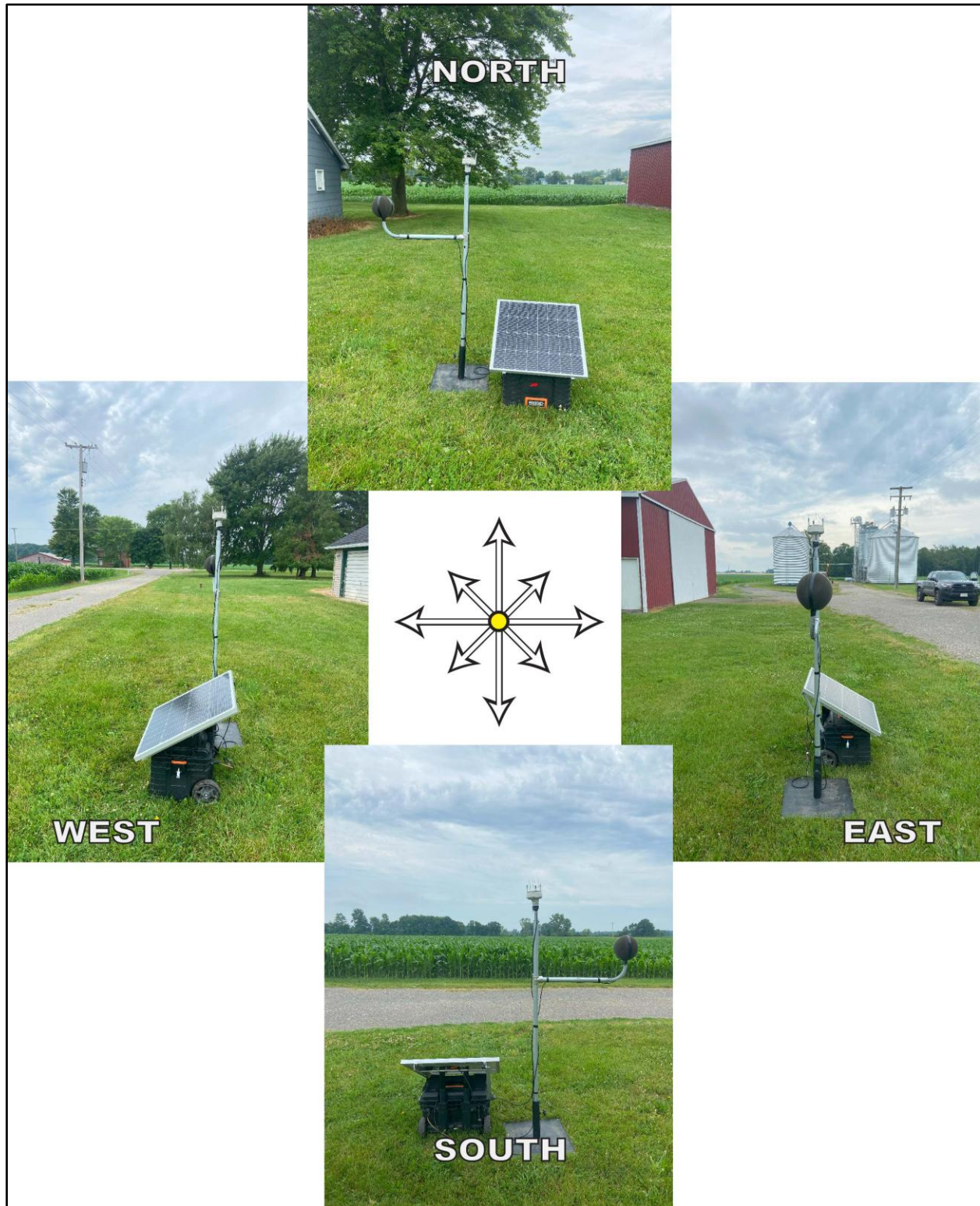


Figure D-6. Photographs of Location Fremont 3

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

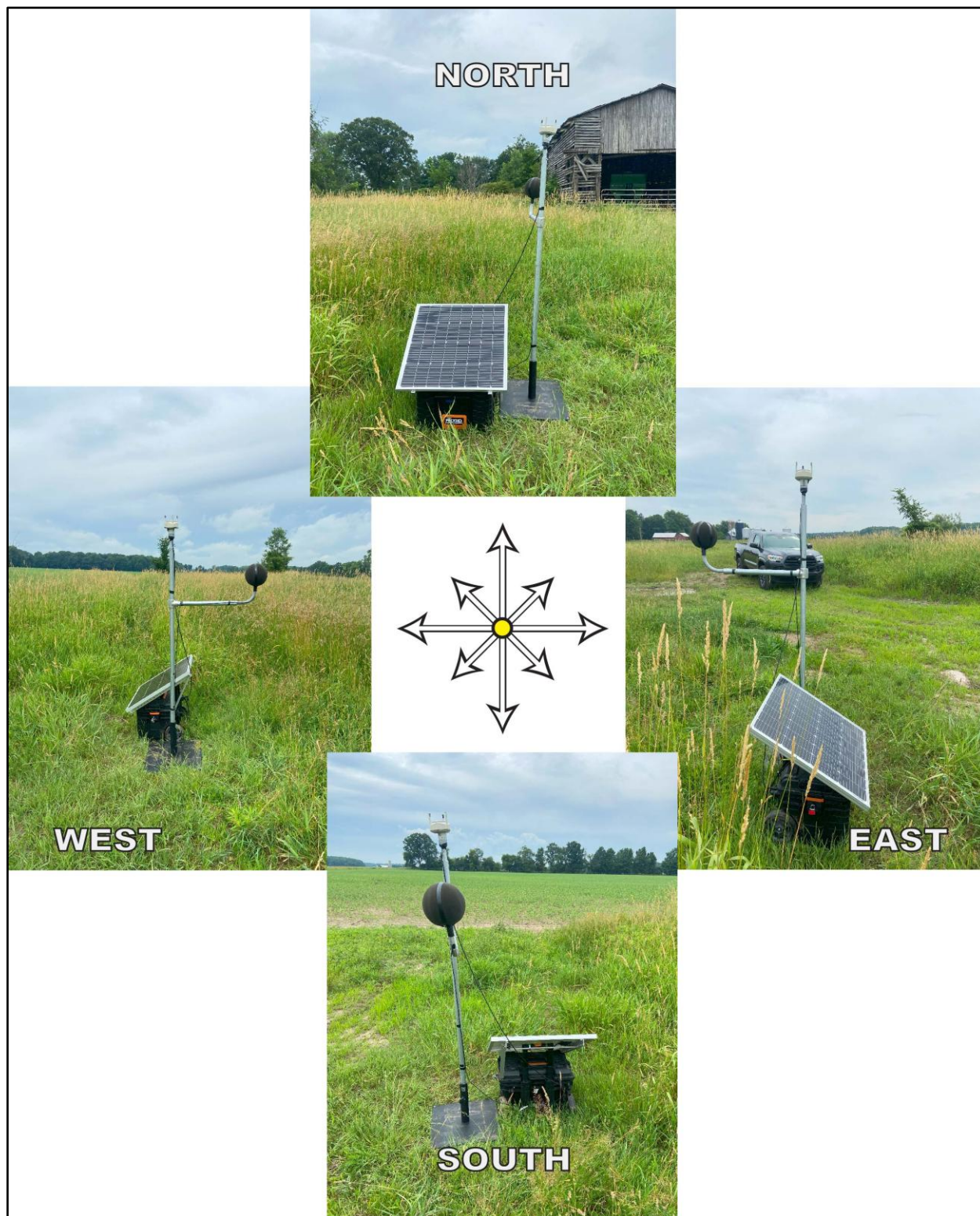


Figure D-7. Photographs of Location Speaker 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

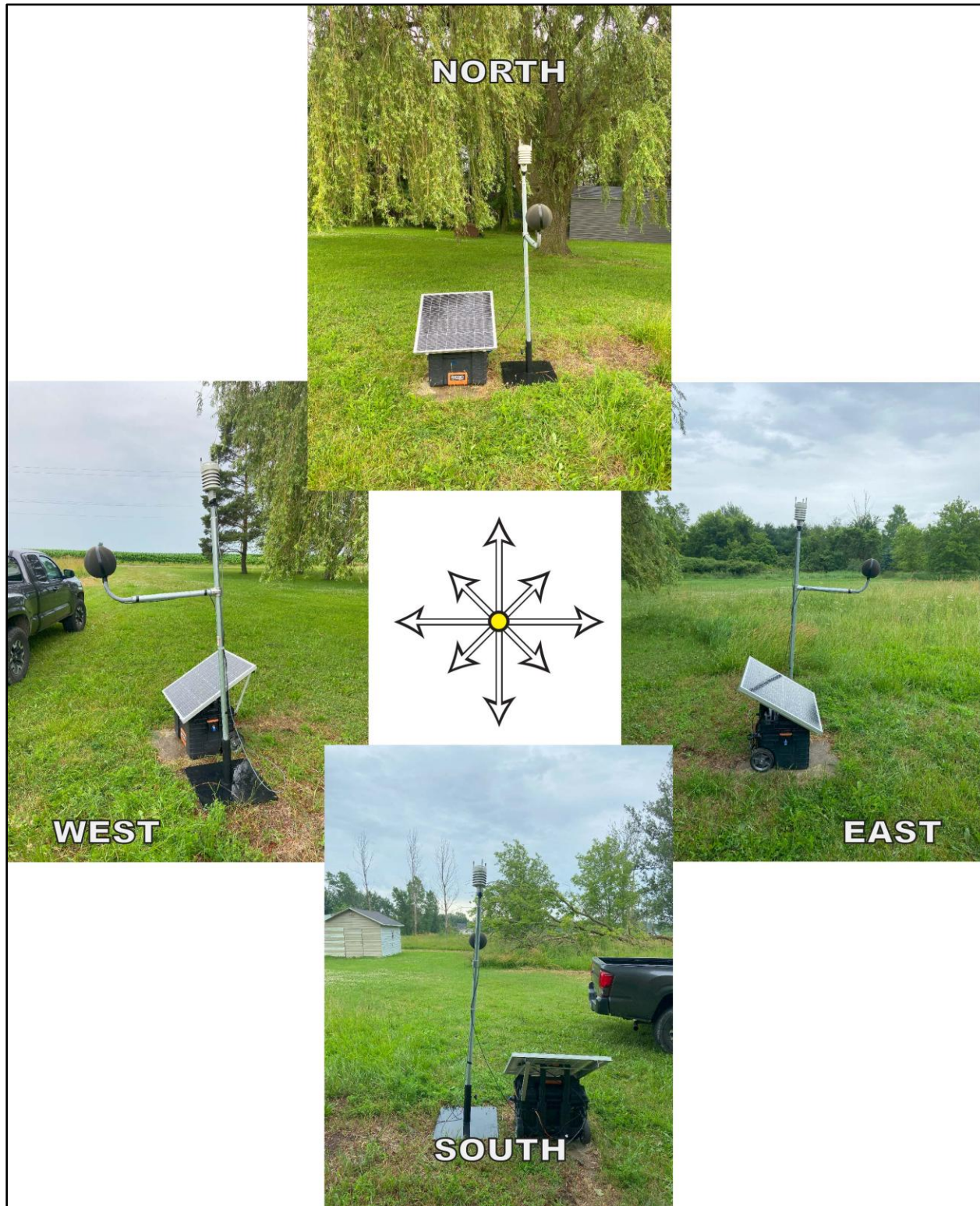


Figure D-8. Photographs of Location Speaker 2

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

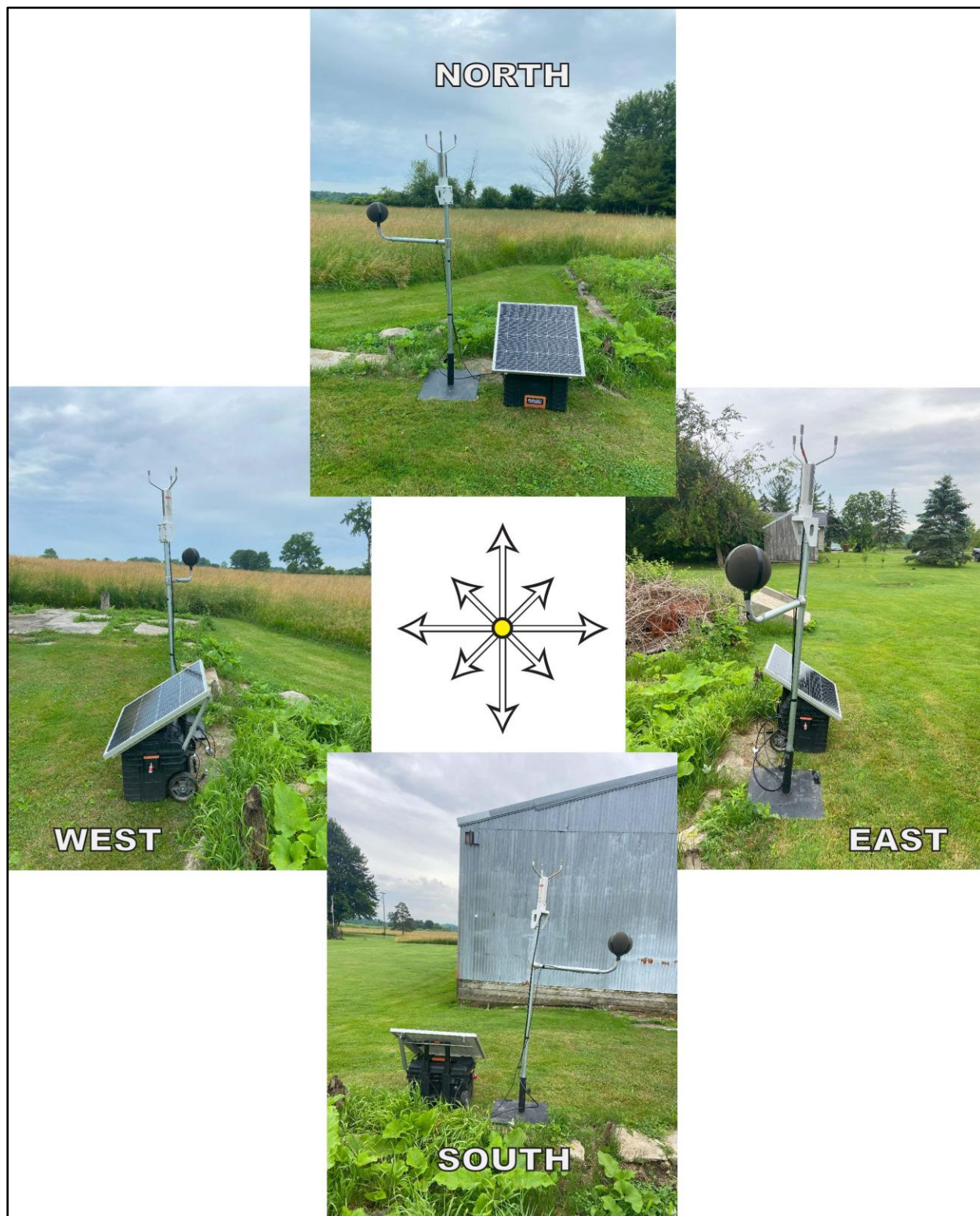


Figure D-9. Photographs of Location Speaker 3

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

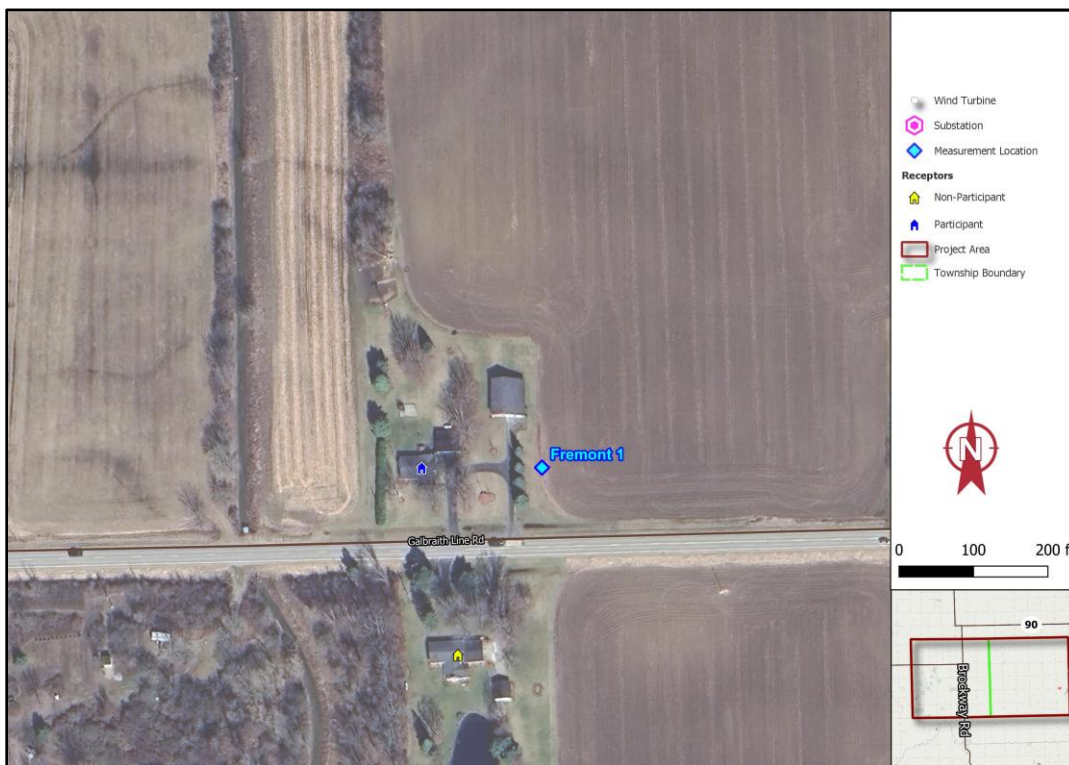


Figure D-10. Measurement Location Fremont 1

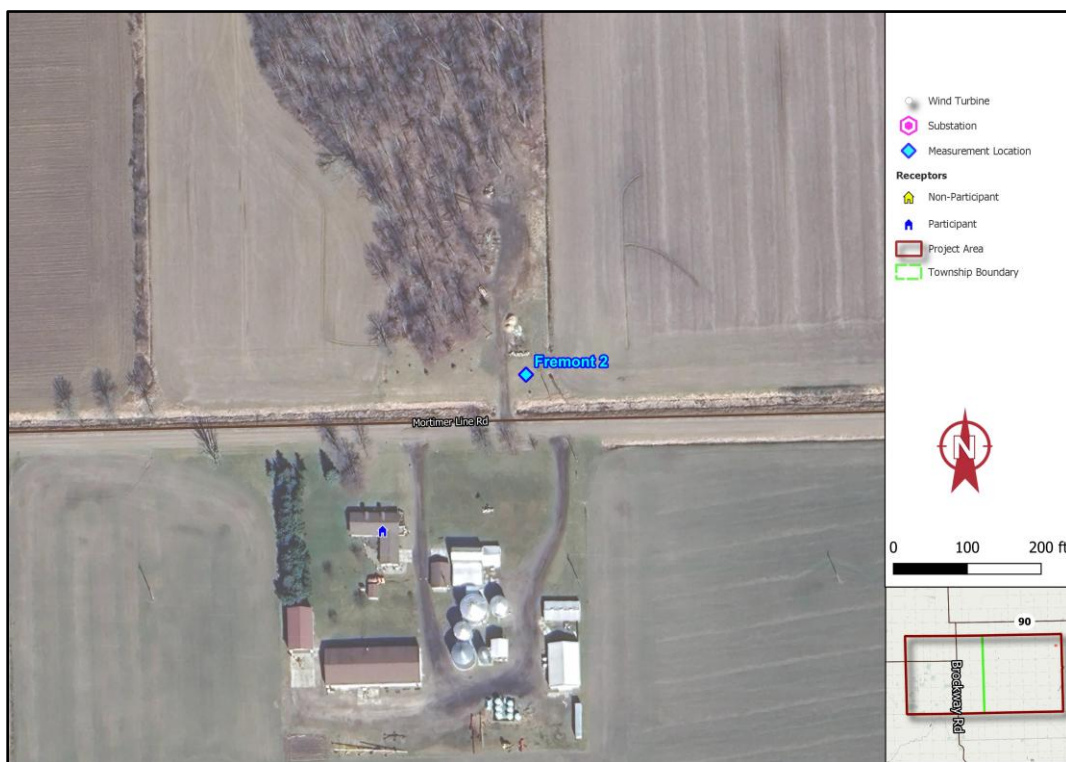


Figure D-11. Measurement Location Fremont 2

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility

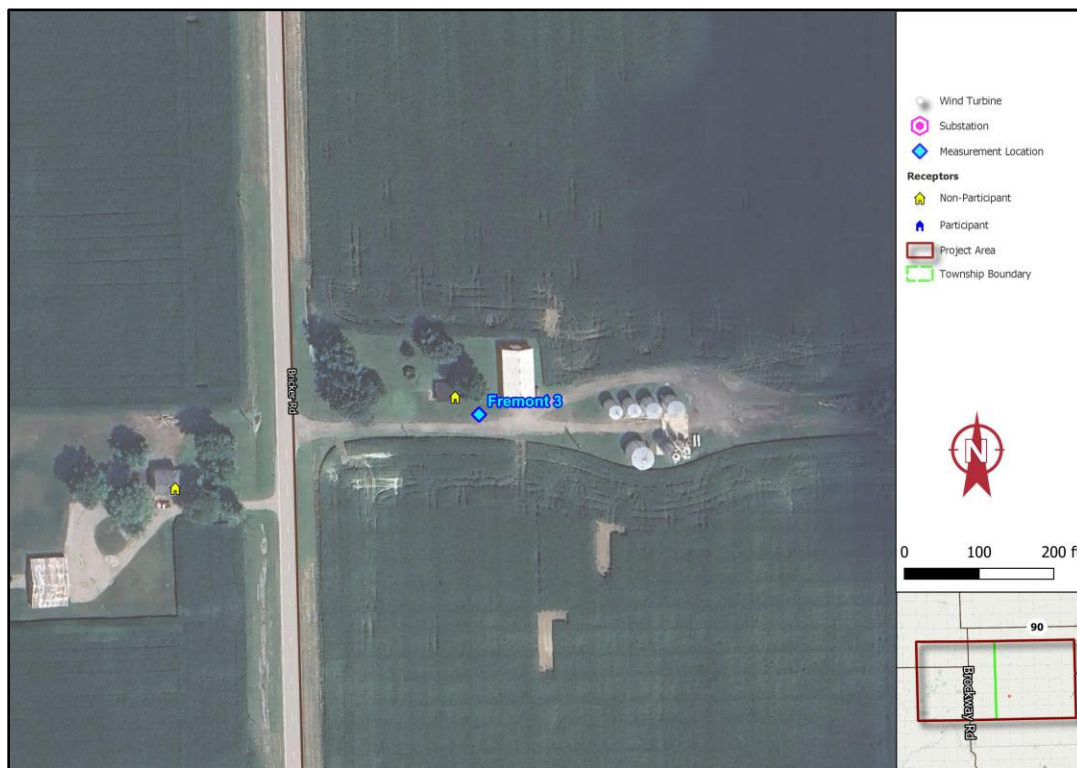


Figure D-12. Measurement Location Fremont 3

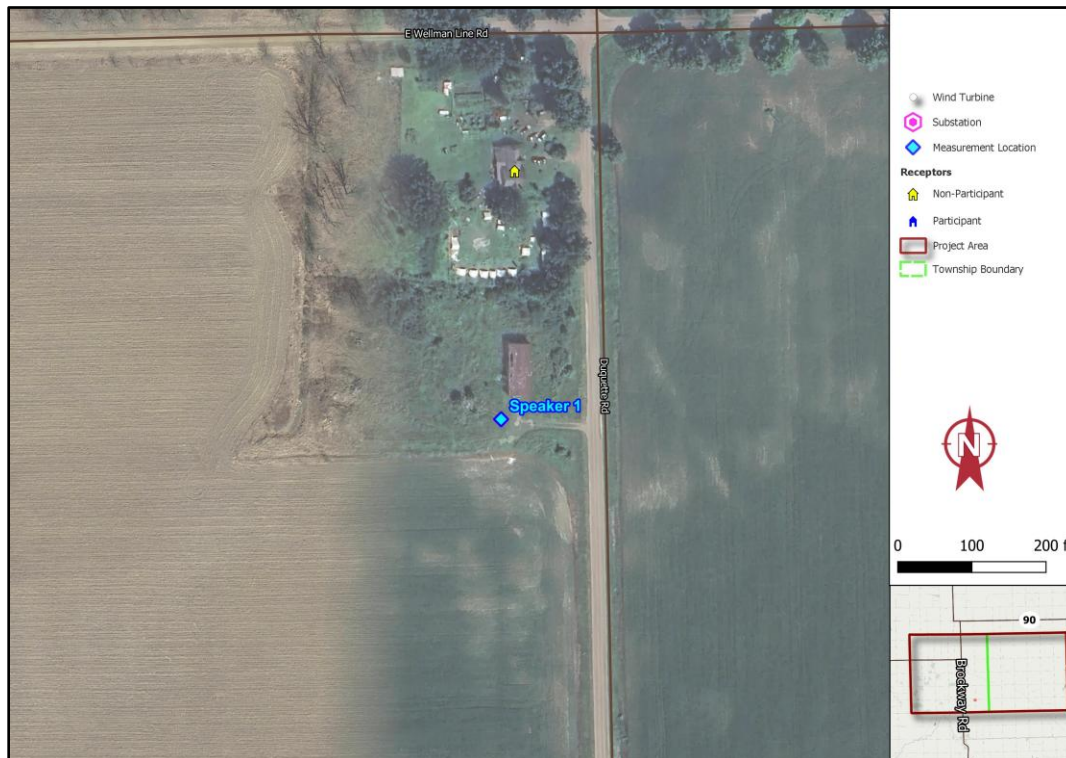


Figure D-13. Measurement Location Speaker 1

Pre-Construction Wind Turbine Noise Analysis for the Proposed
Riverbend Wind Energy Facility



Figure D-14. Measurement Location Speaker 2

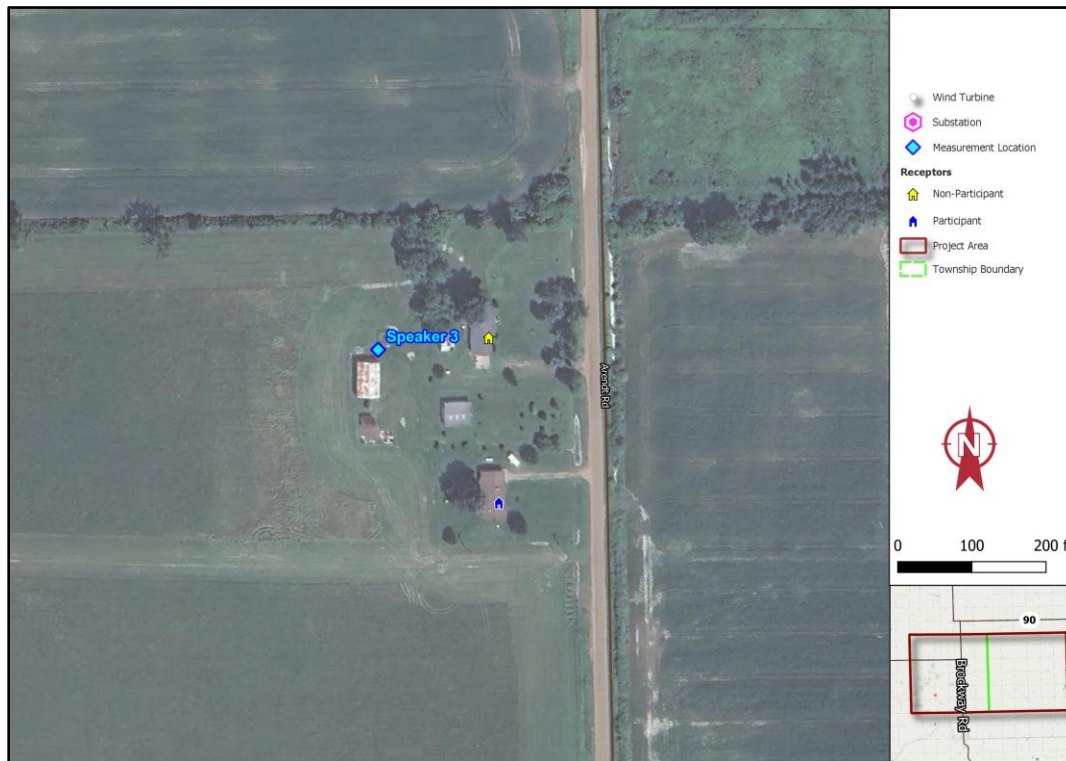


Figure D-15. Measurement Location Speaker 3

Appendix 1.7-C: POST-CONSTRUCTION SOUND MONITORING PROTOCOL

Post-Construction Sound Monitoring Protocol

for the proposed

Riverbend Wind Project

March 5, 2025



Prepared for:

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1. Introduction

This report describes the post-construction sound monitoring equipment, measurement and analysis procedures, and documentation that REV Renewables (Riverbend Wind), LLC commits to pursuant to its application for a Renewable Energy or Storage Siting Certificate under the provisions of Michigan Compiled Laws (MCL) 460.1226(7)(g) for the Riverbend Wind Project (Project, Facility). The Project is expected to produce up to 300 megawatts (MW) of electrical power using up to 50 wind turbines, all of which are to be located in Sanilac County, Michigan. Figure 1-1 shows the general location of the Project, which is approximately 60 miles northeast of Detroit. This report addresses the requirements of Section D1.4, Post-Construction Sound Monitoring Protocol, of the Application Filing Instructions and Procedures (October 2024), including:

- Timing of sound monitoring,
- Sound monitoring locations,
- Sound monitoring equipment,
- Data collection,
- Data analysis methods to be employed,
- Facility sound level analysis,
- Documentation to be submitted,
- Noise complaint resolution process.

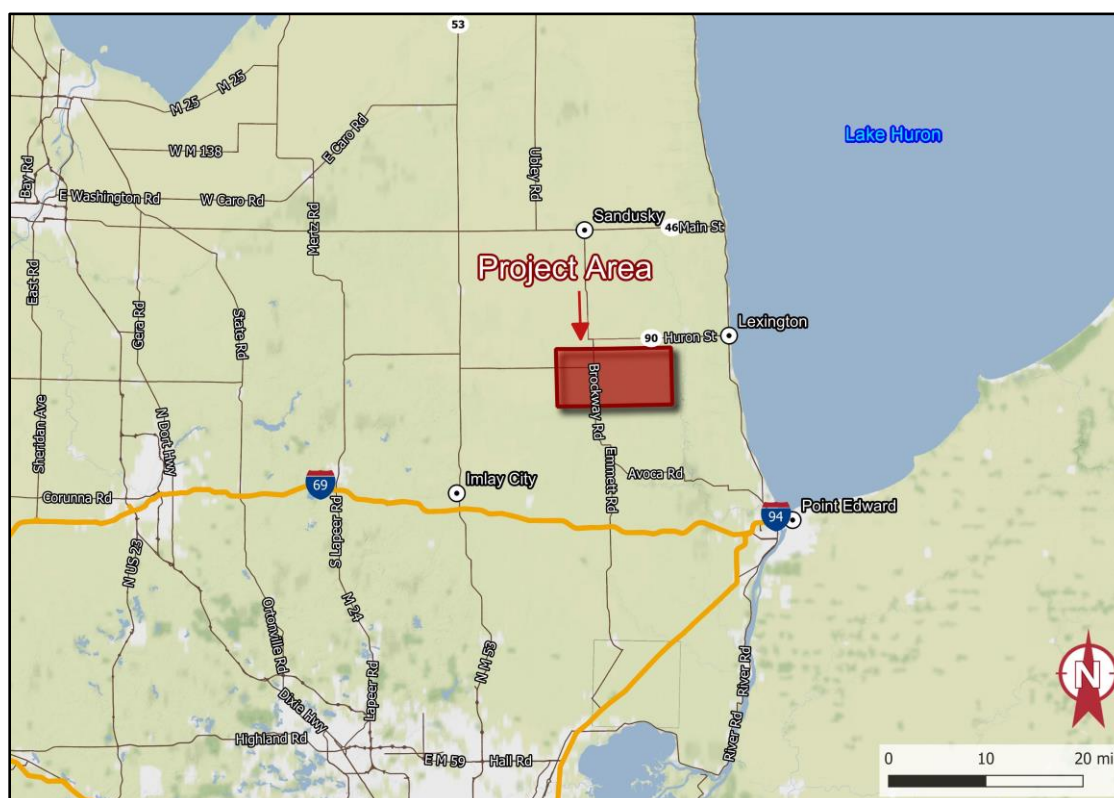


Figure 1-1. General Location of the Proposed Riverbend Wind Energy Center

2. Timing of Sound Monitoring

- The post-construction sound measurements will be conducted within one year of the Project achieving commercial operation.
- The measurements will be conducted during either the spring (approximately March to May) or fall (approximately September to October). It is during these timeframes that weather conditions are generally suitable for wind turbine project post-construction sound monitoring, as wind conditions are sufficient to operate the Project at full capacity, ambient temperatures and relative humidity levels are within the specifications of the sound measurement equipment, and there is little to no snow on the ground.
- The sound level monitors will be operated for at least 10 days or until sufficient valid data (as described below) is obtained, whichever is greater.

3. Siting of Sound Monitoring Locations

- Monitors will be sited at two non-participating dwellings with the highest modeled sound level.
 - If site access is denied by the landowner to measure near or on the dwelling, the sound monitor will be sited at the closest property line or at a nearby location with a similar modeled sound level. If a location with a similar sound level cannot be obtained, then an additional sound level correction will be extrapolated to the dwelling through use of sound propagation modeling.
- Additional monitors for residences with formal noise complaints regarding Facility operation will have monitoring equipment deployed. Up to three additional sound monitoring locations will be identified for monitoring, representing areas where any noise complaints were received.
 - If more than three locations have received complaints, then three will be selected based on the modeled sound levels of each location and how well a site can represent other complaint locations.
- Consideration of whether monitoring will be done at a location will also be based on:
 - The type of complaint,
 - Whether the complaint was due to a continuing operational issue or a non-recurring event,
 - Whether the modeled free-field sound level is above 44 dBA,
 - Whether the landowner cooperates with the study.
- Sound level meter microphones will be placed outside, approximately 1.5 m above the ground.
 - The microphone will not be placed such that any structure blocks the line of sight between the microphone and otherwise visible Facility components.
- The monitoring will be conducted at least 25 feet from any building façade or other large reflective objects.
- The monitoring equipment will be placed away from dense vegetation or other contributing sources of transient and consistent sound.

4. Equipment Setup

- Sound levels will be measured using monitors that meet ANSI/IEC Class 1 specifications (e.g., IEC 61672-1 and ANSI S1.4).
- A 7-inch diameter hydrophobic windscreen will be fitted to each microphone.
- Sound level meters will be coupled with audio recorders to aid in sound source identification and soundscape characterization.
- Each sound level meter will be field calibrated using an acoustical calibrator meeting IEC 60942 Class 1 specifications immediately before and after the monitoring campaign. Any calibration drift will be noted and addressed in accordance with ANSI S12.18.
- Each sound level meter and calibrator will be calibrated within two years/one year, respectively, of the completion of monitoring, by a National Institute of Standard and Technology traceable facility.
- The monitors will be mounted at least 25 feet from any vertical reflecting surfaces.
- Anemometers will be located adjacent to the monitoring station at approximate microphone height.
- A representative sound monitoring system is shown in Figure 4-1.



Figure 4-1. Representative Sound Monitoring Setup

5. Data Collection

- To the extent possible, the sound monitoring will conform to IEC TS 61400-11-2.
- Sound levels will be collected in terms of the A-weighted overall level (L_{eq}) and unweighted one-third octave band levels.
- In addition, statistical levels (L_{10} , L_{50} , L_{90}) will be collected both in terms of A-weighted overall levels and unweighted one-third octave band levels.
- All sound level, ground wind, hub-height wind, and turbine operations data will be logged in 10-minute intervals. In addition, all sound level and ground wind data will also be logged in 10-second intervals to facilitate filtering per ANSI S12.9 Part 3 and IEC TS 61400-11-2.
- Wind speeds near ground level (2 meters above the ground) will be collected at each sound monitoring location. Both average and maximum wind gust speeds will be measured and recorded.
- Hub-height wind speed data will be obtained from the anemometers atop the turbines of interest, or from the Project's on-site meteorological tower(s) if that data is collected at hub-height.
- Hub-height (or approximate) wind direction data will be obtained from the Project's on-site meteorological tower(s).
- Temperature and relative humidity will be obtained from the nearest National Weather Service station.
- Operations data on a 10-minute interval basis will be collected for each of the nearest four turbines to each sound monitoring location, including total electrical power output and rotor speed.
- All of the above-described data will be collected continuously throughout the survey.
- The audio recorders associated with each sound monitor will either be run continuously or triggered to record above a level of 44 dBA.
- Shut-down testing: All wind turbines within 1.5 miles of each monitor location will be shut down approximately four times per night for at least 20 minutes at a time.

6. Data Analysis

The measured sound, wind, and turbine operations data will be analyzed as follows:

- Maximum wind turbine sound will be assessed at night when non-turbine noise is typically lowest and meteorological conditions are favorable for the propagation of sound.
- All measured data, including overall and one-third octave band sound levels, ground wind speed, hub-height wind speed and direction, turbine operations, and weather conditions will be assembled into a single database and aligned in time. From the logged data for each monitor, each 10-minute period will be aggregated to determine overall A-weighted L_{eq} , one-third octave band L_{eq} , maximum wind gust near the ground, average wind speed near the ground, wind direction hub-height wind speed, wind turbine power production, and Facility operational state.
- 10-minute periods during which any of the following conditions occur will be excluded from analysis:
 - High wind gust speeds, which are defined as ground-level wind gust speeds above 5 m/s (11.2 mph),
 - High average wind speeds, which are defined as ground-level 10-minute average wind speeds above 4 m/s (9.0 mph),
 - Wind turbines within 1.5 miles operating at less than 1 dB of their maximum sound power output, expressed as an arithmetic average of those wind turbines,
 - The wind direction being either outside of an azimuth of ± 45 degrees downwind relative to the closest wind turbines or ± 45 degrees of the prevailing wind direction,
 - Precipitation being present, which is defined as snow, rain, and thunderstorm events identified through regional data and inspection of acoustic data,
 - Anomalies present in the sound data, which are defined as the presence of short-term contaminating sound caused by human or other activity that is atypical of the site,
 - Ambient temperature or humidity outside the specification of the sound level meter or microphone.
- For any remaining data containing a notable quantity of biogenic sound the dBAi metric will be calculated according to ANSI S12.100.
- The presence of prominent discrete tones will be assessed by comparing the total sound level in a given one-third octave band to the adjacent one-third octave bands for each minute according to ANSI S12.9 Part 4-2005 Annex C. Any one-minute period with prominent discrete tones will have a tonal penalty of 5 dB applied to the data if the tone is audible.
- 6 dBA will be added to each sound level to account for façade pressure doubling.
- The remaining data will be aggregated into one-hour intervals. One hour time periods containing less than three 10-minute periods will be eliminated from the analysis.

7. Facility Sound Level Analysis

The sound levels attributable to the Facility (Facility sound) will be determined in accordance with the applicable portions of ANSI S12.9 Part 3 and, to the extent possible, the applicable portions of IEC TS 61400-11-2.

- Facility sound will be determined by an operational shutdown-based methodology and will be calculated from the total (Facility + background) sound by quantifying the background sound immediately before or after a period of Facility operation at the same location. The Facility sound will be determined by subtracting, on an energy basis, the background sound level from the total sound level, by one-third octave band.
- All wind turbines within 1.5 miles of a monitor location will be shut down four times per night for 20 minutes at a time. One-hour periods of wind turbine operation before and after each shutdown shall be evaluated in 10-minute intervals.
- The temporal filtering method will be applied. This method assumes that wind speeds do not substantively change in the 20 minutes the facility is shut down. This will be confirmed qualitatively by comparing the turbine power production prior to the shutdown to the power production afterward. Alternatively, ground wind speeds measured at each monitor may be evaluated. If they are sufficiently similar, the background period can be assumed to be representative of the background conditions during the adjacent one-hour turbine operational periods. Otherwise, the one-hour periods around the background measurement will not be used to calculate the facility L_{1h} .
- For measurement methodologies that involve sound source shutdowns to establish the background sound levels, the compliance measurement period will be from one hour before the shutdown to one hour after the shutdown. Otherwise, the compliance measurement periods would consist of all valid periods under the protocol for each compliance measurement period.
- At least three valid one-hour facility one-hour sound levels will be collected for each monitoring location. The highest valid Facility one-hour sound level will be used for comparison to the MI MCL 450.1226 noise limit.

8. Documentation

- A sound monitoring report will be submitted within 60 calendar days of the end of field data collection.
- The report will include the following:
 - A Facility site map identifying relevant project components and nearby features of interest, including the nearest dwellings and monitor locations,
 - Identification of monitoring location with pictures,
 - A narrative of monitoring results including soundscape characteristics and effects of site conditions on measurements as derived from site visits and monitored data, as well as any significant features of the data,
 - Time history results including ground-level wind speed and rainfall, Facility operational data (power output and shutdown dates/times if used) and overall A-weighted hourly sound level time histories for L_{10min} , L_{1h} and optionally one-hour L_{90} , L_{50} , and L_{10} sound level metrics.
 - Details for each compliance measurement period:
 - 10-minute power output for individual sound sources,
 - Hub-height wind speed and wind direction for each wind turbine within 1.5 miles of the measurement location,
 - Average wind speed and maximum wind gust from the monitor anemometer for each 10-minute period,
 - Temperature and relative humidity,
 - Unweighted one-third octave band and overall A-weighted sound levels for each 10-minute period,
 - Determination of whether the period is valid and if not, the reasoning,
 - If the period is valid, the background-corrected Facility one-third octave band and overall A-weighted sound level for each 10-minute period and for the entire one-hour period.
 - Presence of icing as indicated through icing alarms or visual observation,
 - If results of the postconstruction study indicate that the Facility sound levels exceed the noise limit, mitigation measures will be detailed in the report along with a schedule of implementation.
- Upon the request of MPSC Staff, all sound monitoring data and results will be submitted in electronic format. If necessary, confidential data will be submitted with a confidential protective order.

9. Complaint Resolution Process

Riverbend Wind will maintain a Complaint Resolution Process for the life of the facility. If the Plant Manager receives a complaint related to noise, the Plant Manager will make reasonable efforts to respond to the complaint within two (2) business days of receipt of the complaint. The complaint will be added to the Complaint Log. If after review of the complaint by the Plant Manager it is determined that an immediate resolution cannot be delivered, a timeline and measures to be taken will be provided to the complainant. These measures may include setting up monitoring equipment at the complainant's place of residence to collect sound levels.

If substation noise from the Project is the subject of a noise complaint, then the substation sound will be measured in accordance with the General Procedures of Section 2.3 outlined in Attachment D of MPSC Certificate for Solar Energy, Wind Energy, and Energy Storage Facilities Application Filing Instructions and Procedures.