

Technical Appendix 9-5 Background Noise Survey Measurement Data

EIAR – Volume 3

Muingmore Wind Farm

SLR Project No.: 501.065301.00001

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RWE Renewables Ireland Limited
Muingmore Wind Farm – Noise and Vibration
Technical Appendix 9-5
Background Noise Survey Measurement Data

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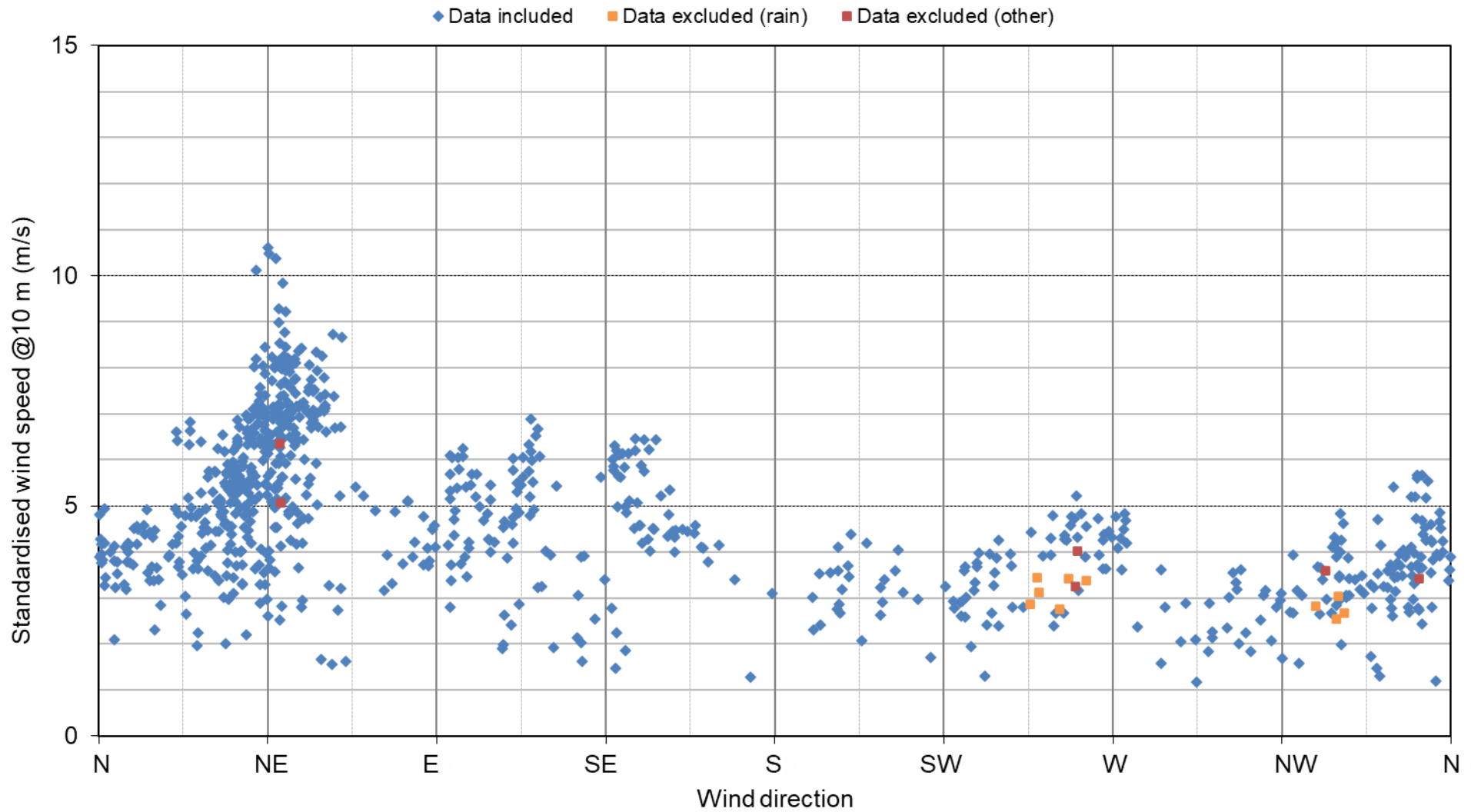
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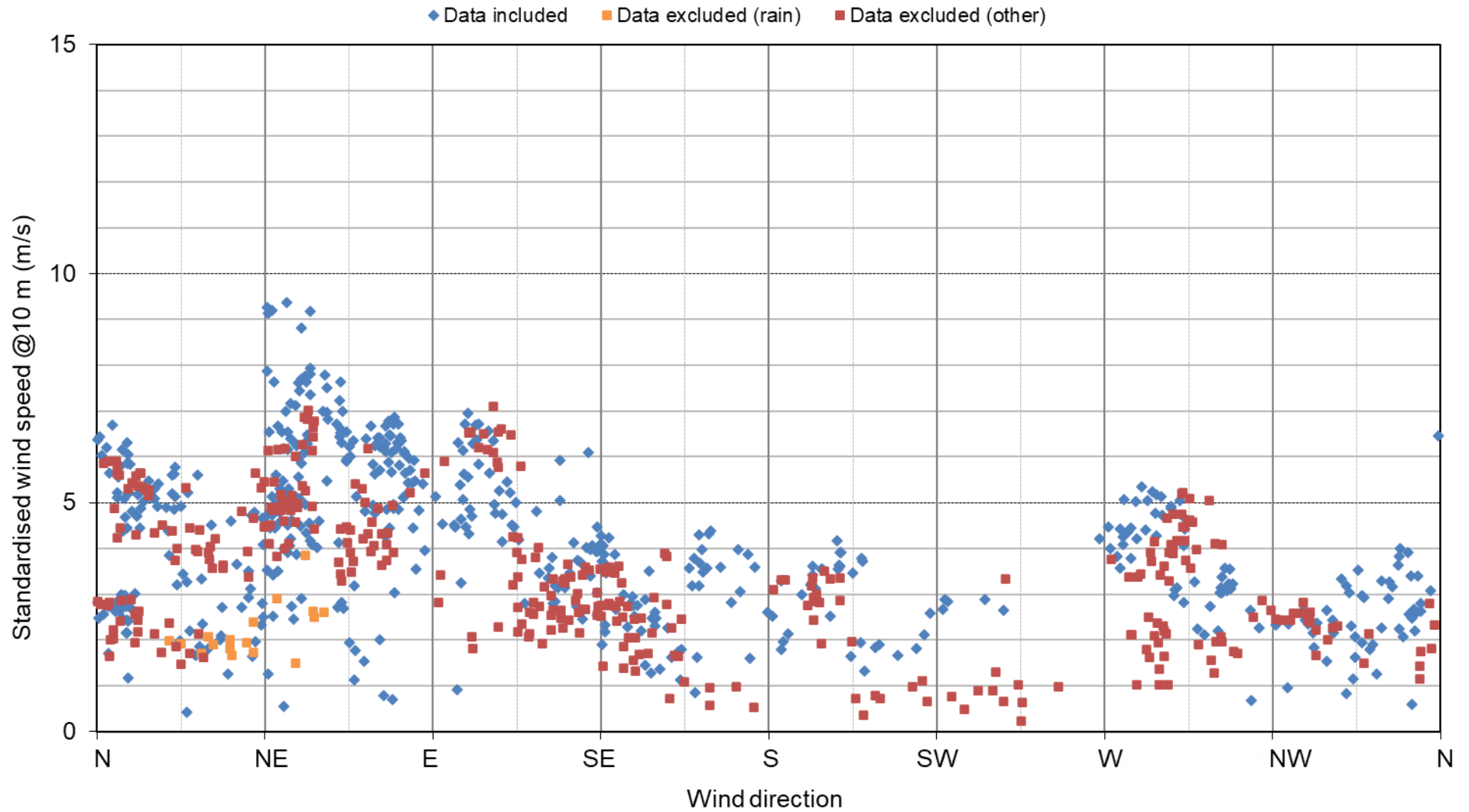
1 Introduction

- 1.1.1 This Appendix contains the details of the noise and wind data measured during the background noise survey. For all graphs shown, blue diamonds represent data points that have been included in the assessment, orange squares illustrate where data have been excluded due to rain, and red squares show where data have been excluded for other reasons, such as evidence of extraneous noise.
- 1.1.2 Graph 9-1 and Graph 9-2 show the range of wind speeds and directions captured during the background noise survey; the data is shown for noise measurement location (NML) NML1. It can be seen in Graph 9-2 that there are greater exclusions during the night-time period, which are predominantly due to dawn chorus, as set out in Chapter 9 of the EIA Report.
- 1.1.3 Graph 9-3 to Graph 9-16 display the measured noise level, in terms of the L_{A90} parameter, plotted against the standardised 10 m wind speed for each of the noise measurement locations and the quiet daytime and night-time periods. These figures display the data points that are included and excluded, together with the trend line and expression which passes through all included data points. The noise limit has been shown on these graphs as a thick black line.

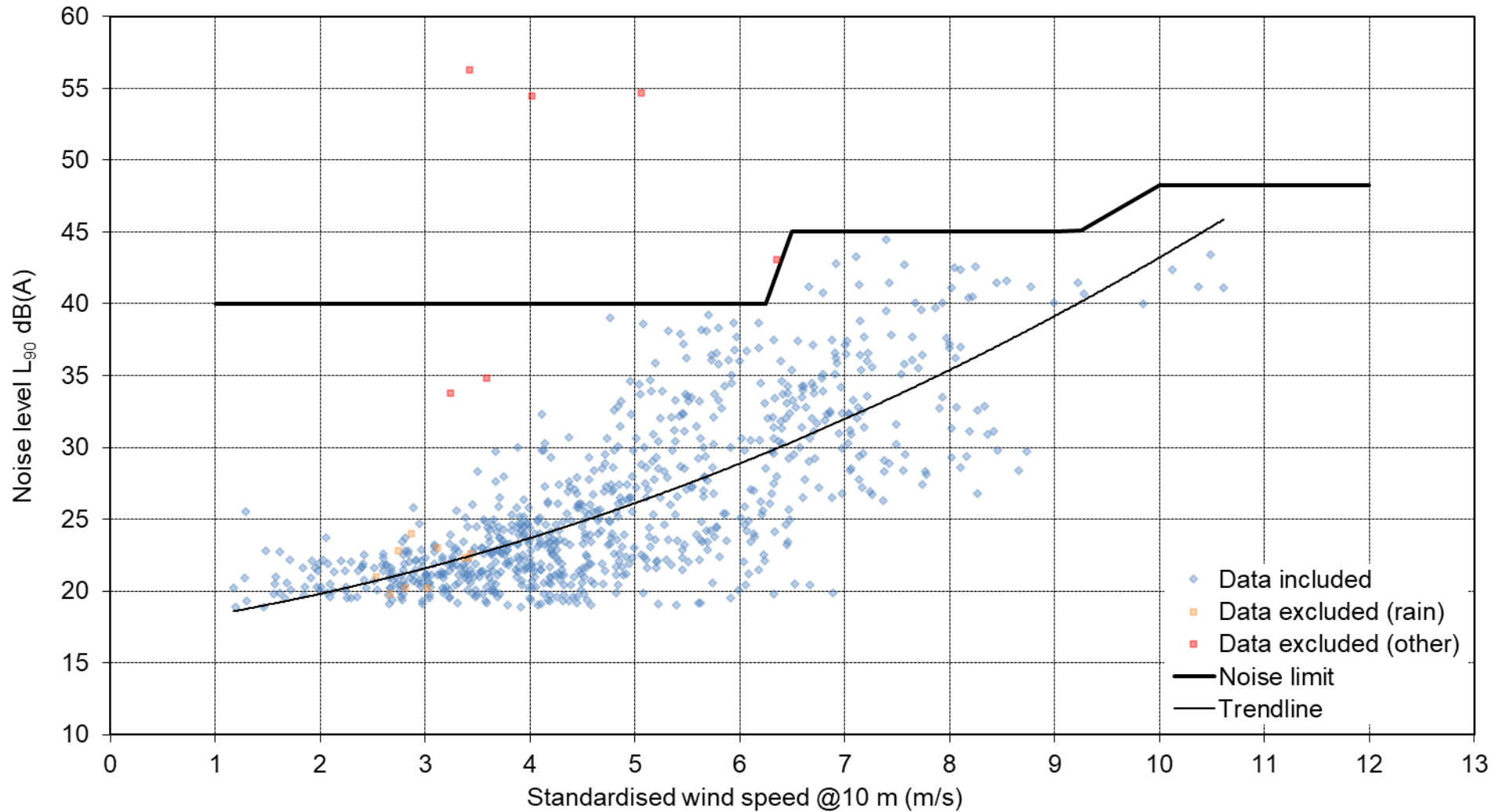
Graph 9-1 - Wind Speed and Direction Data During Baseline Noise Survey - Quiet Daytime Period



Graph 9-2 - Wind Speed and Direction Data During Baseline Noise Survey – Night-time Period

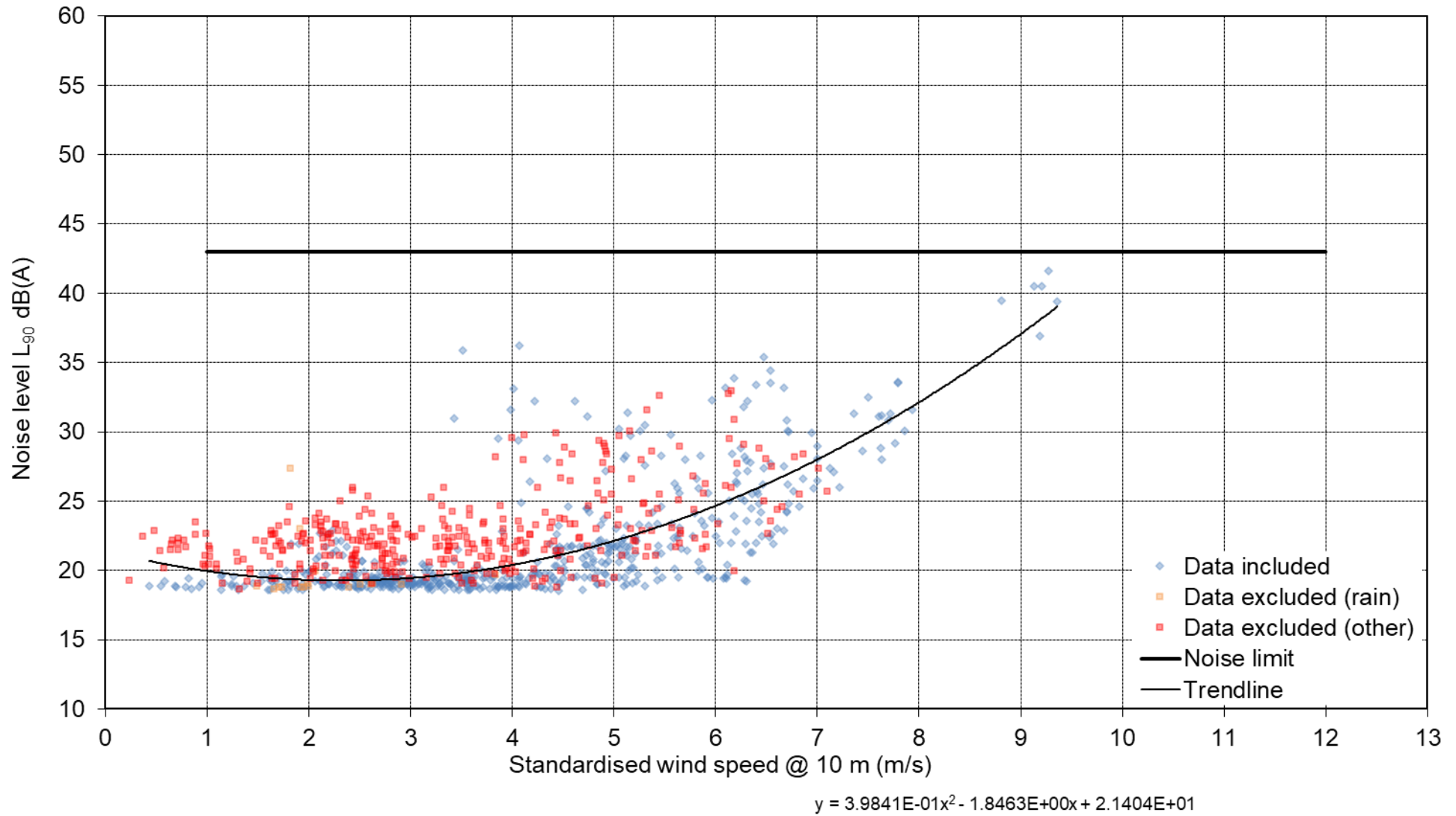


Graph 9-3 – Background Noise Data During Baseline Noise Survey – Quiet Daytime Period – NML1

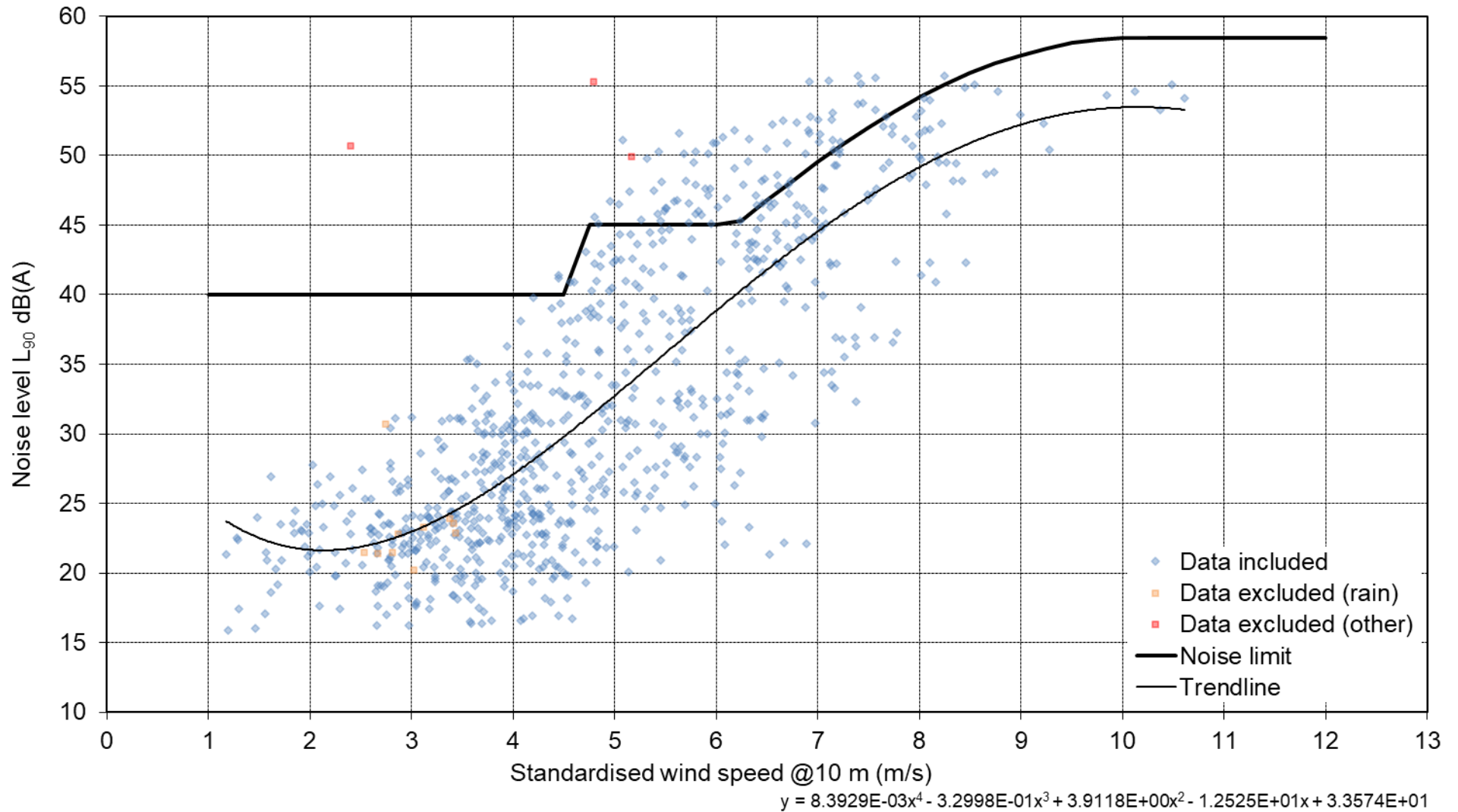


$$y = 1.6457E-01x^2 + 9.5172E-01x + 1.7244E+01$$

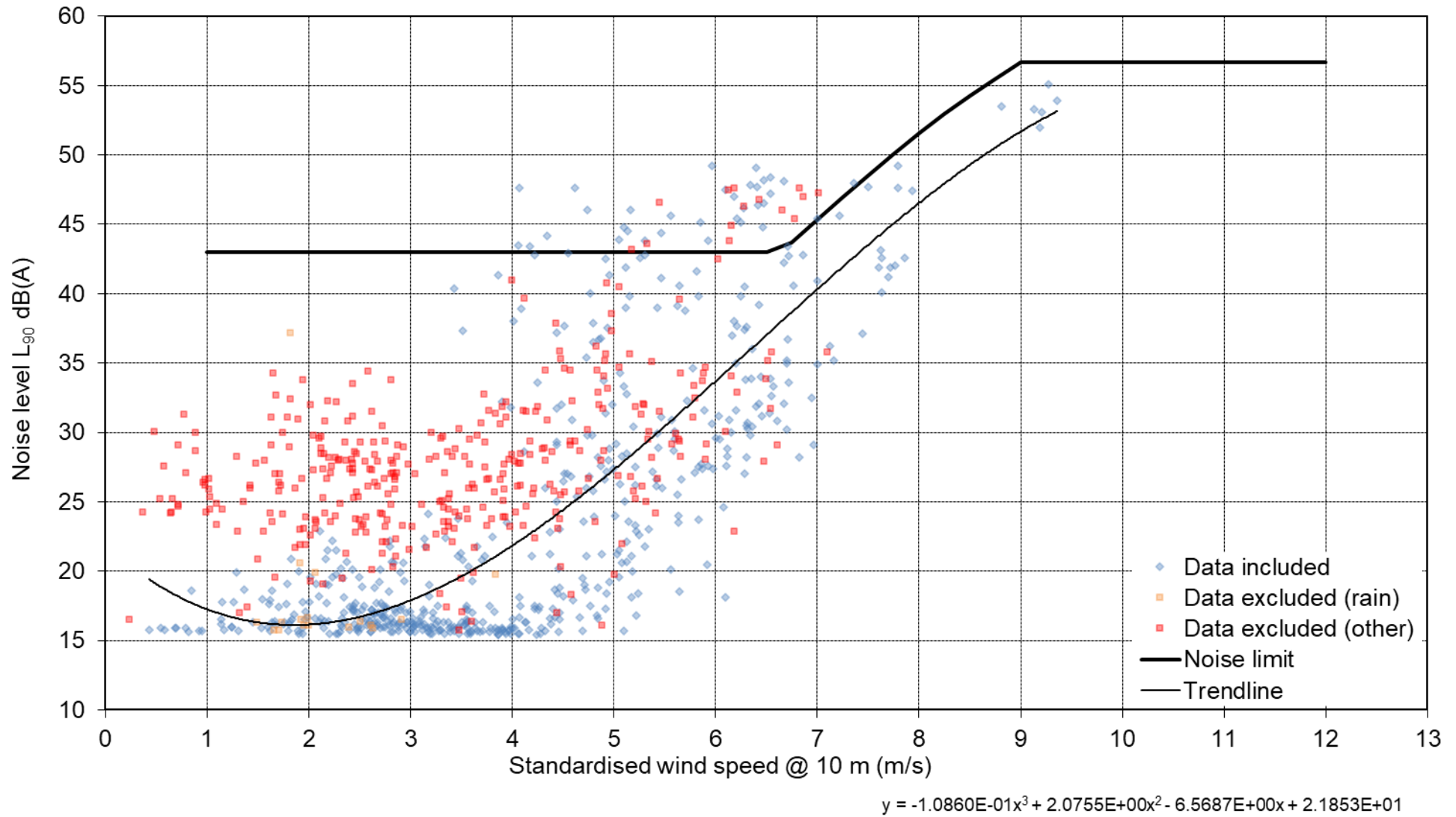
Graph 9-4 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML1



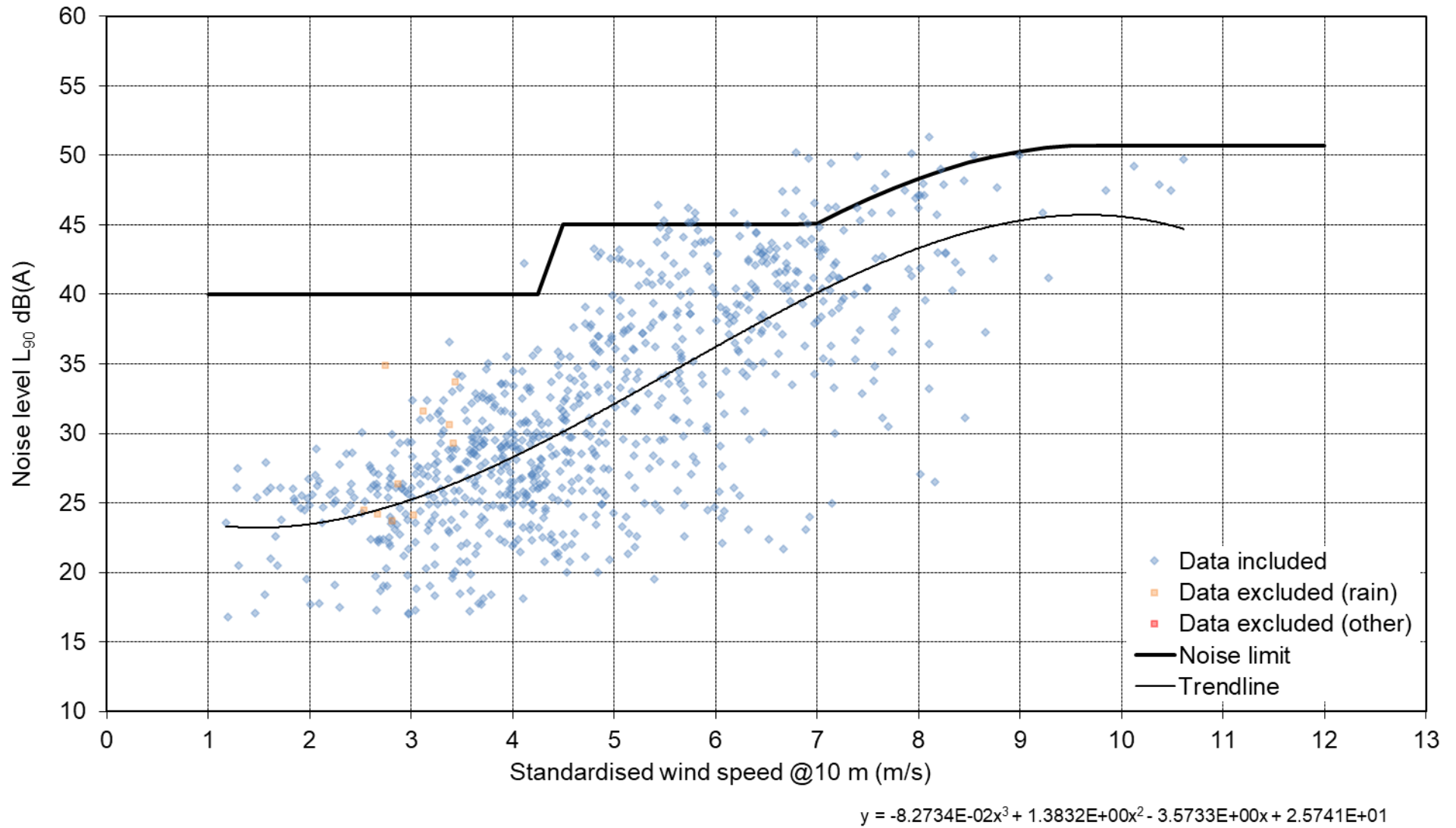
Graph 9-5 – Background Noise Data During Baseline Noise Survey – Quiet Daytime Period – NML2



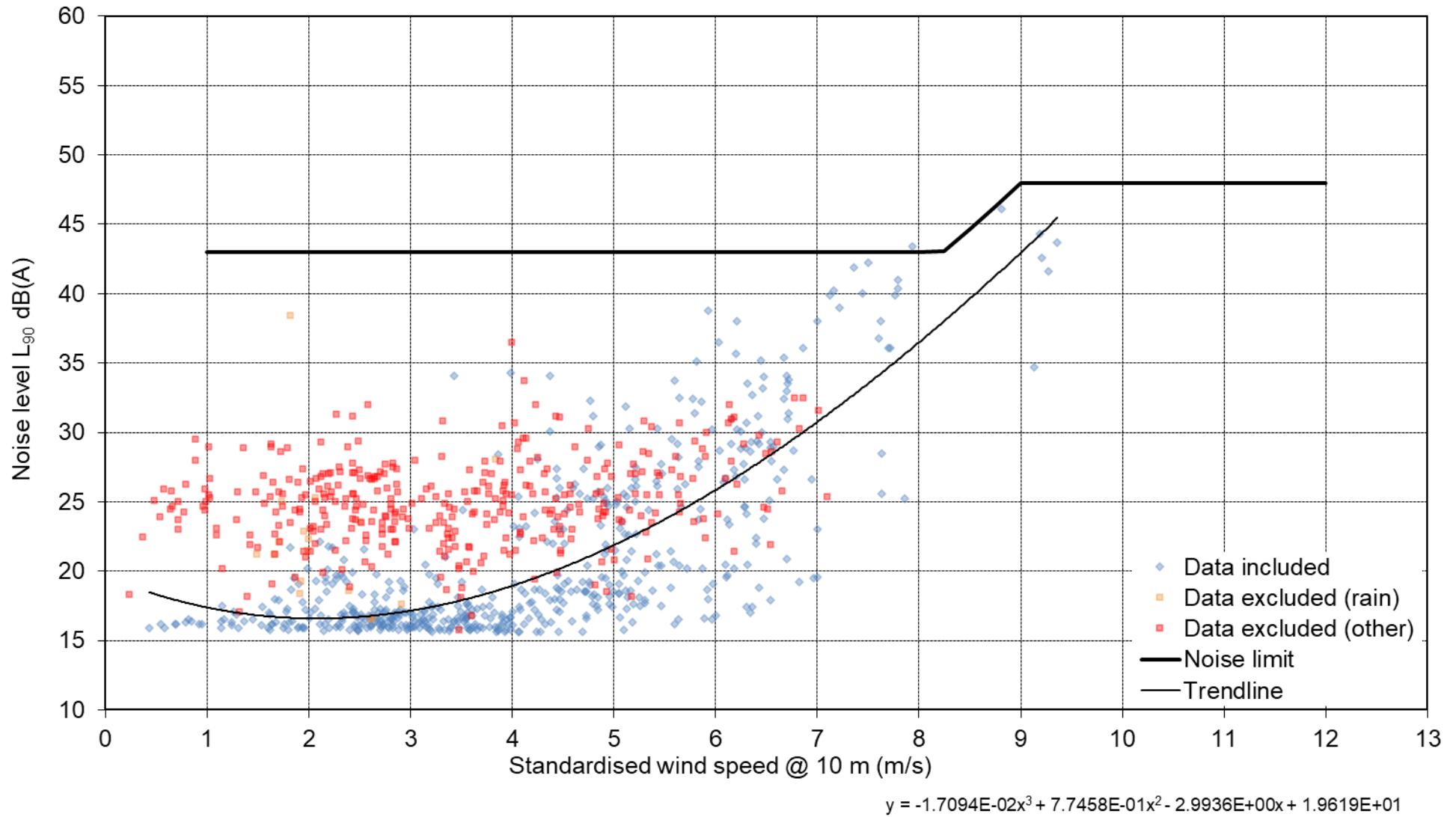
Graph 9-6 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML2



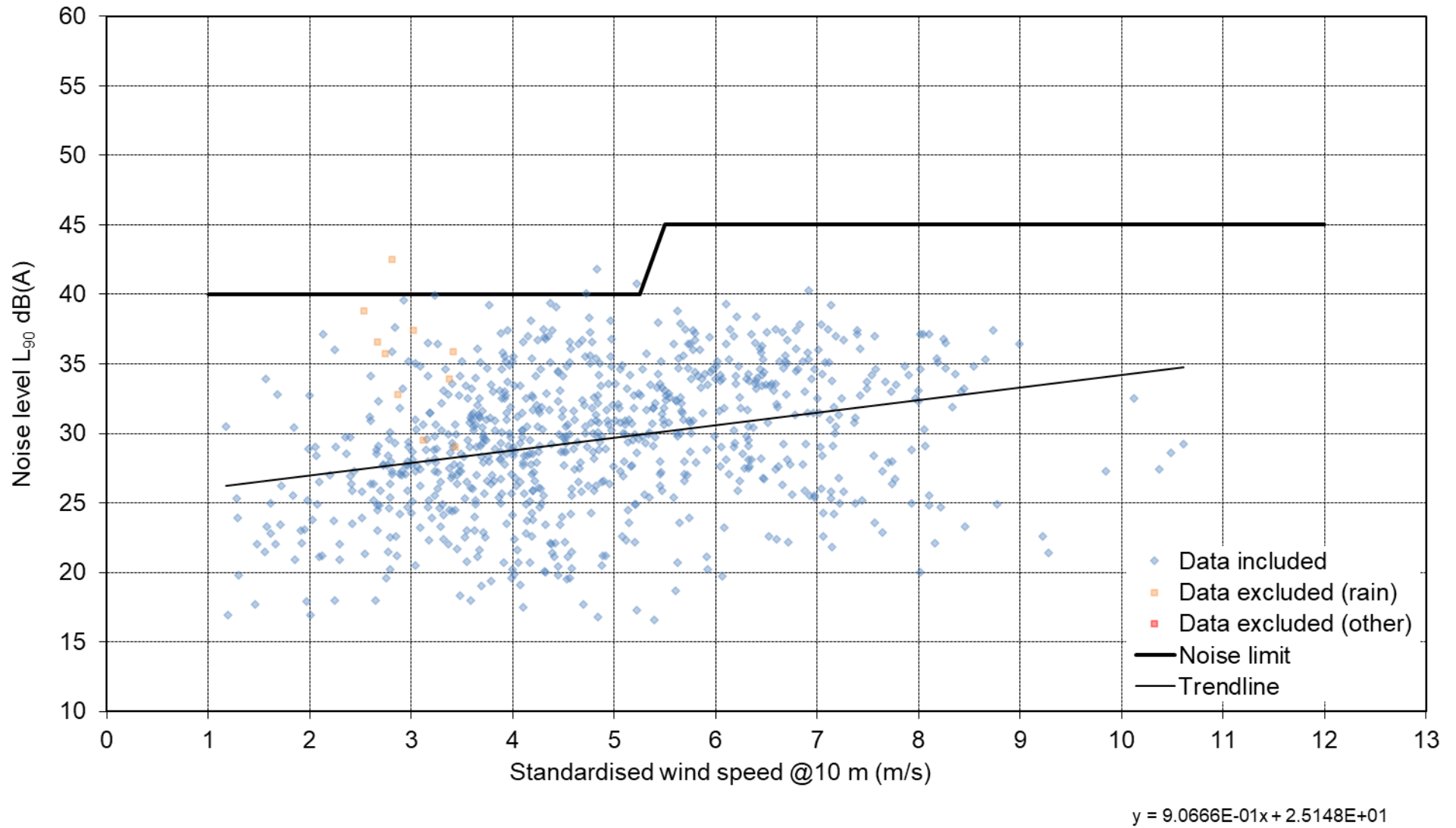
Graph 9-7 – Background Noise Data During Baseline Noise Survey – Quiet Daytime Period – NML3



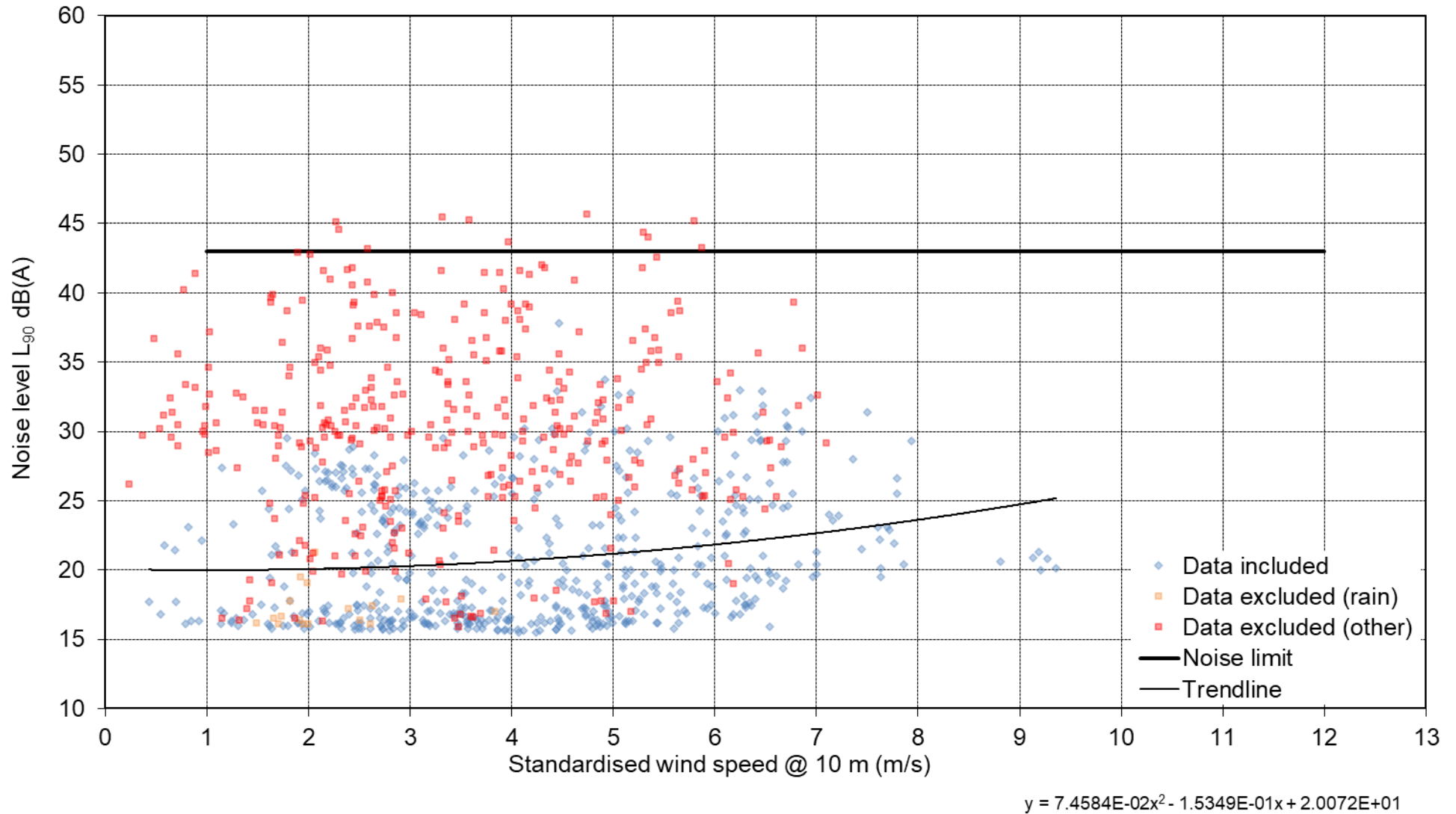
Graph 9-8 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML3



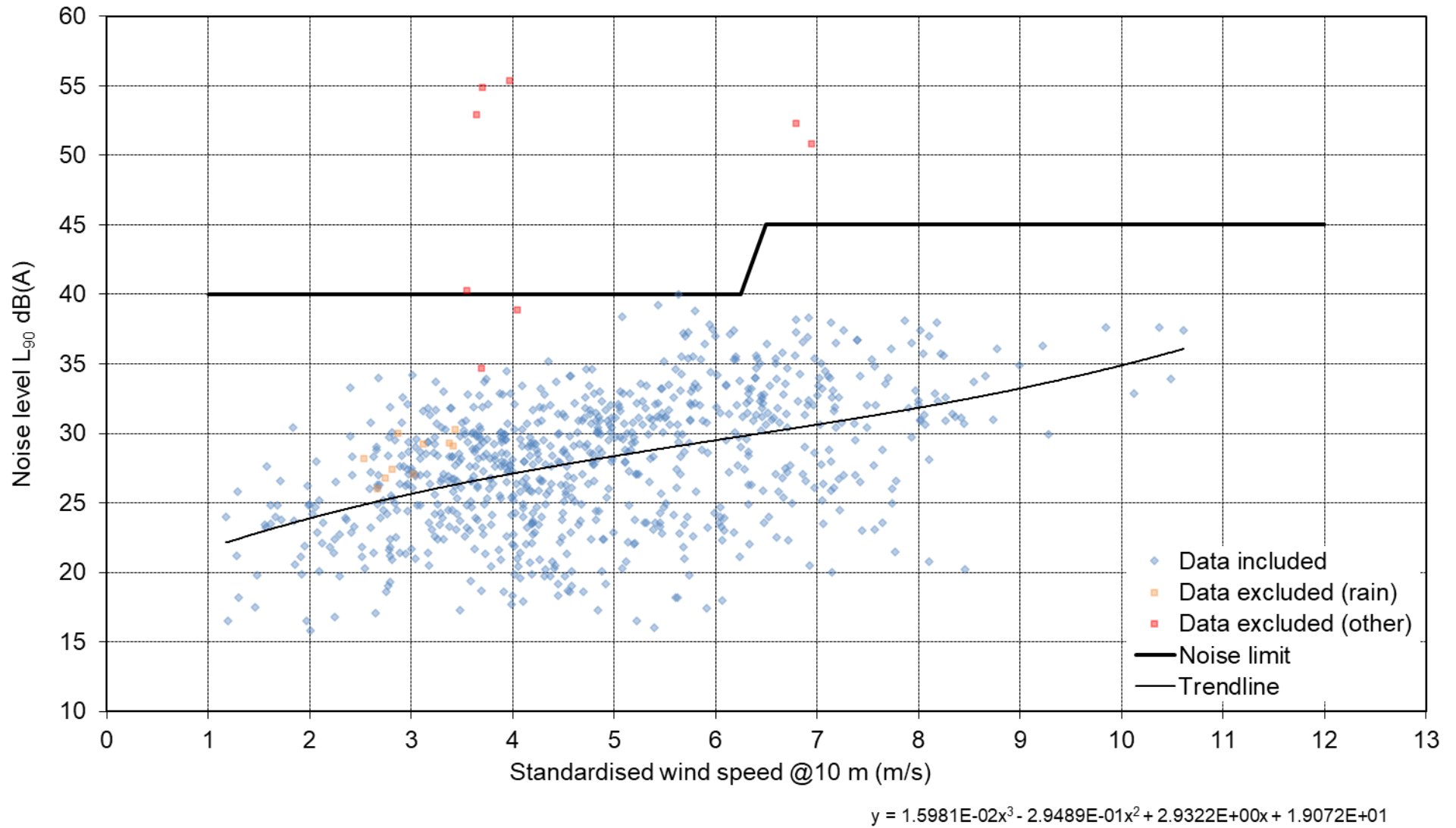
Graph 9-9 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML4



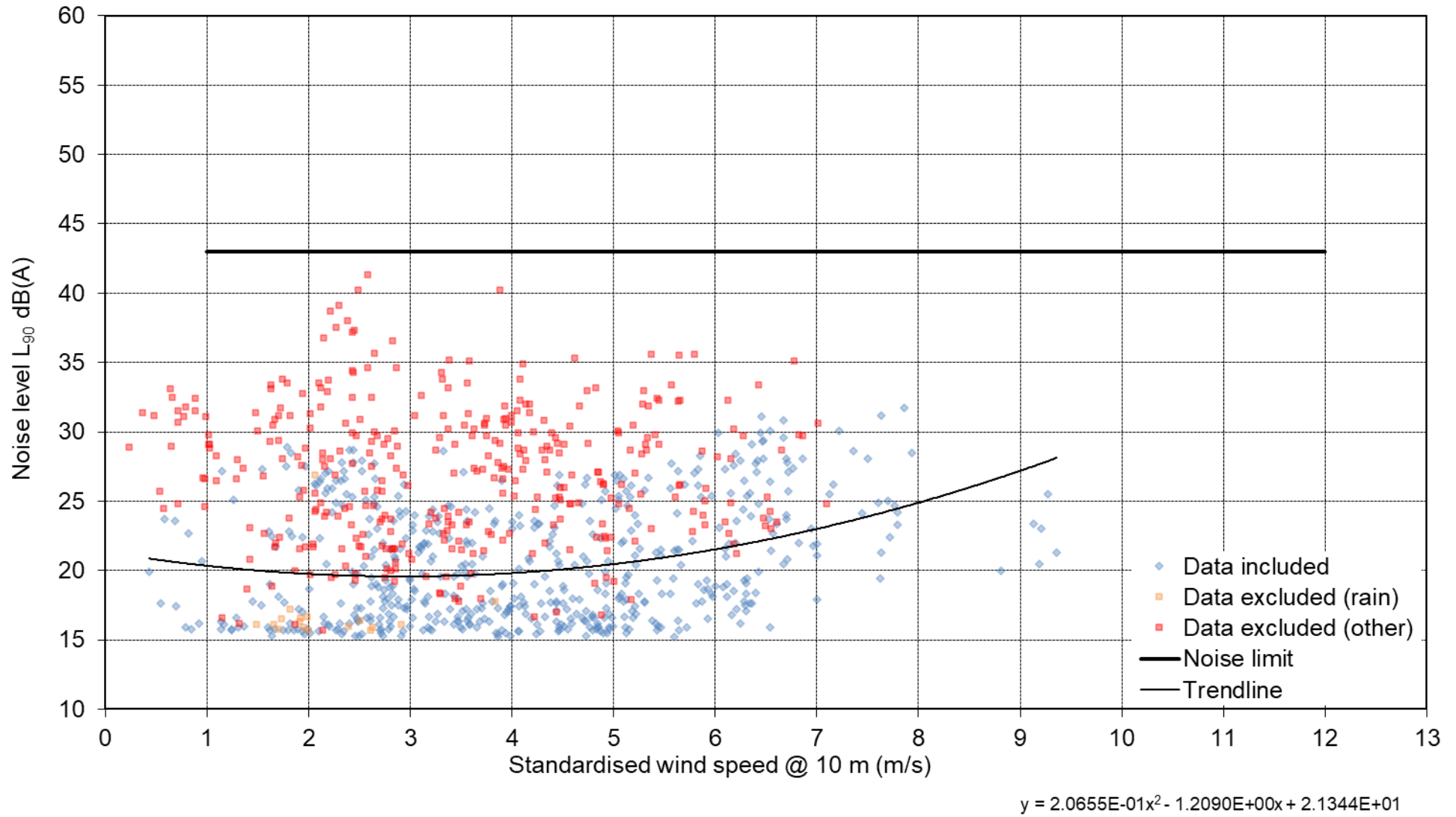
Graph 9-10 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML4



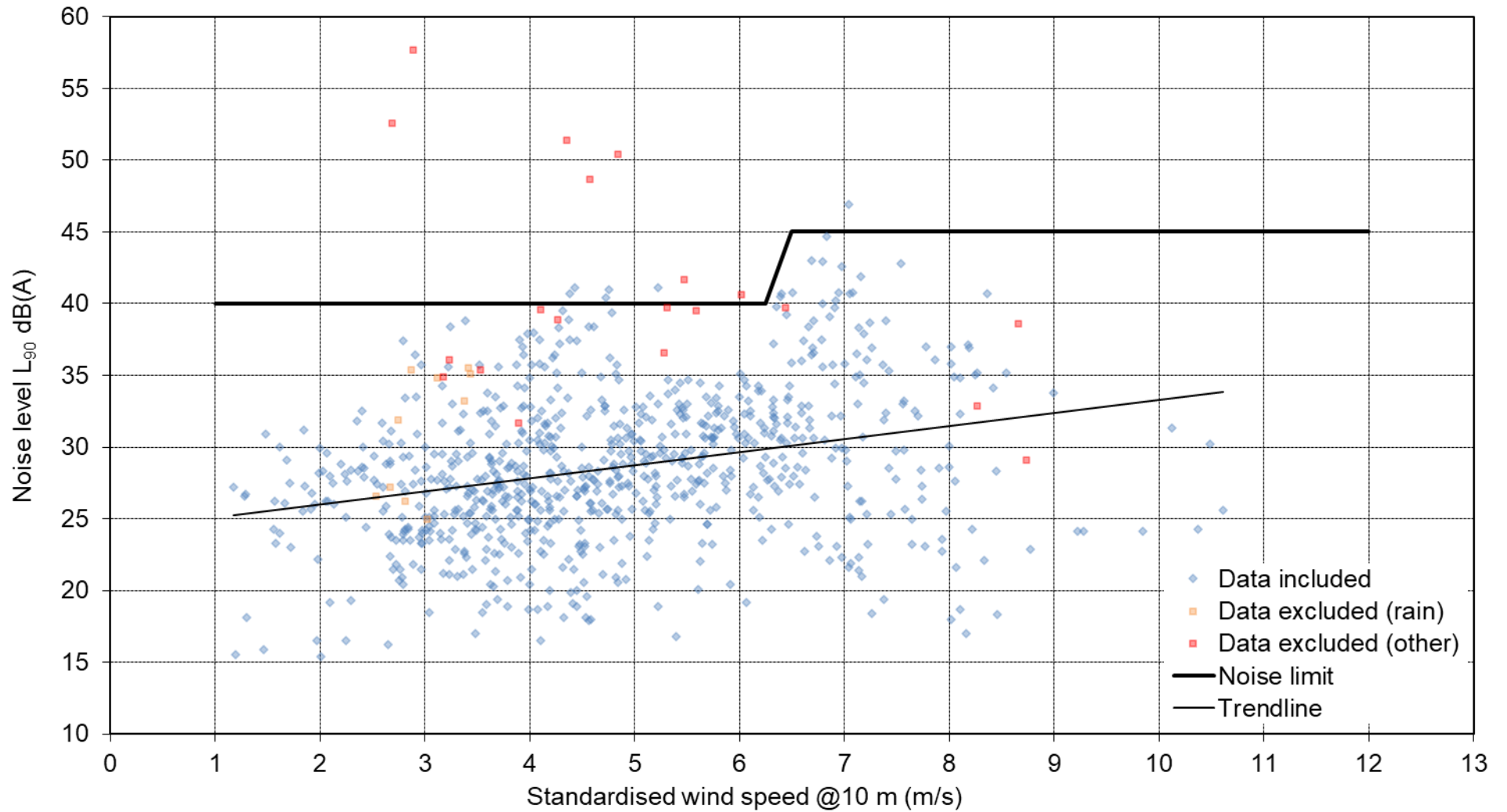
Graph 9-11 – Background Noise Data During Baseline Noise Survey – Quiet Daytime Period – NML5



Graph 9-12 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML5

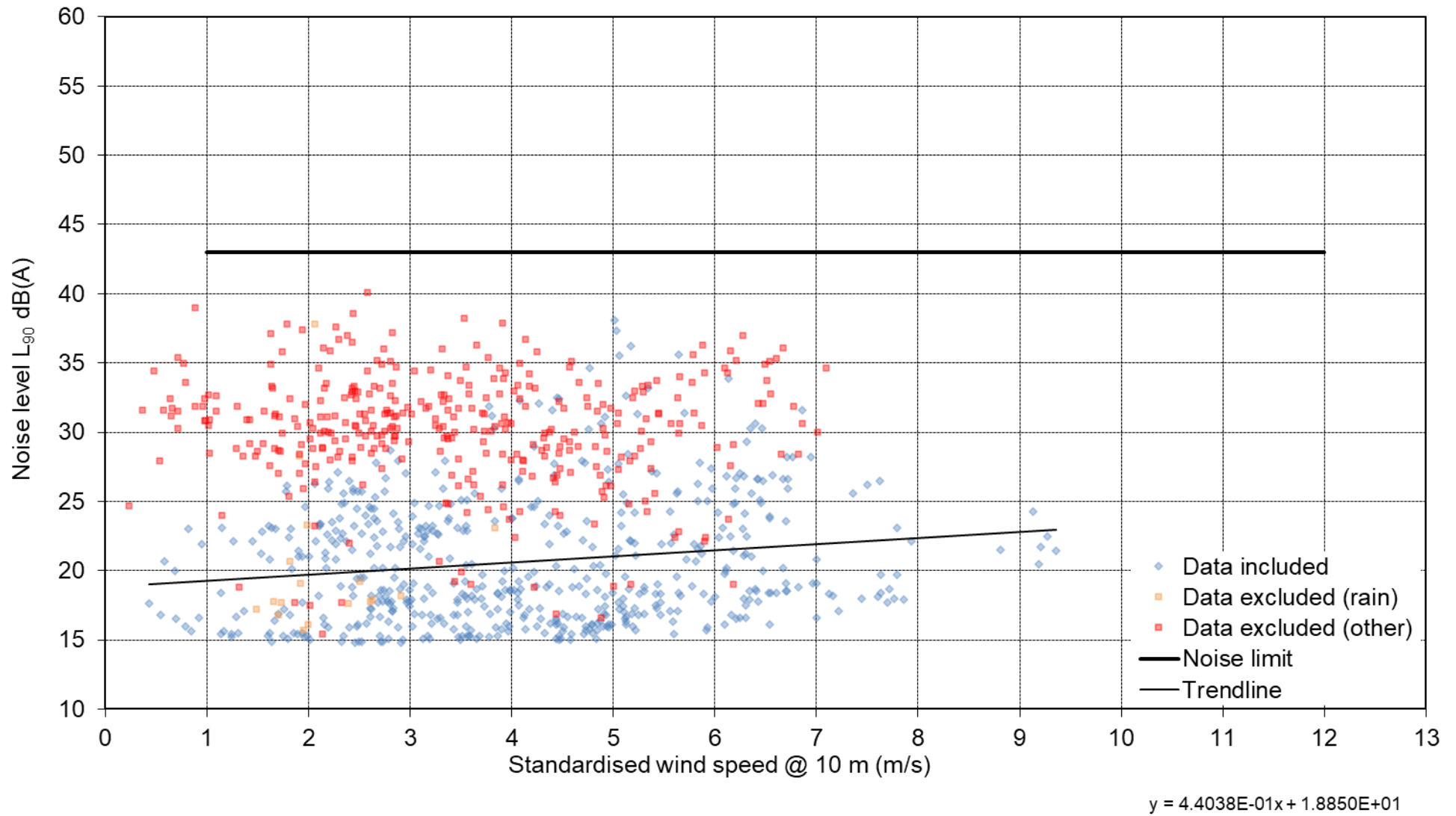


Graph 9-13 – Background Noise Data During Baseline Noise Survey – Quiet Daytime Period – NML6

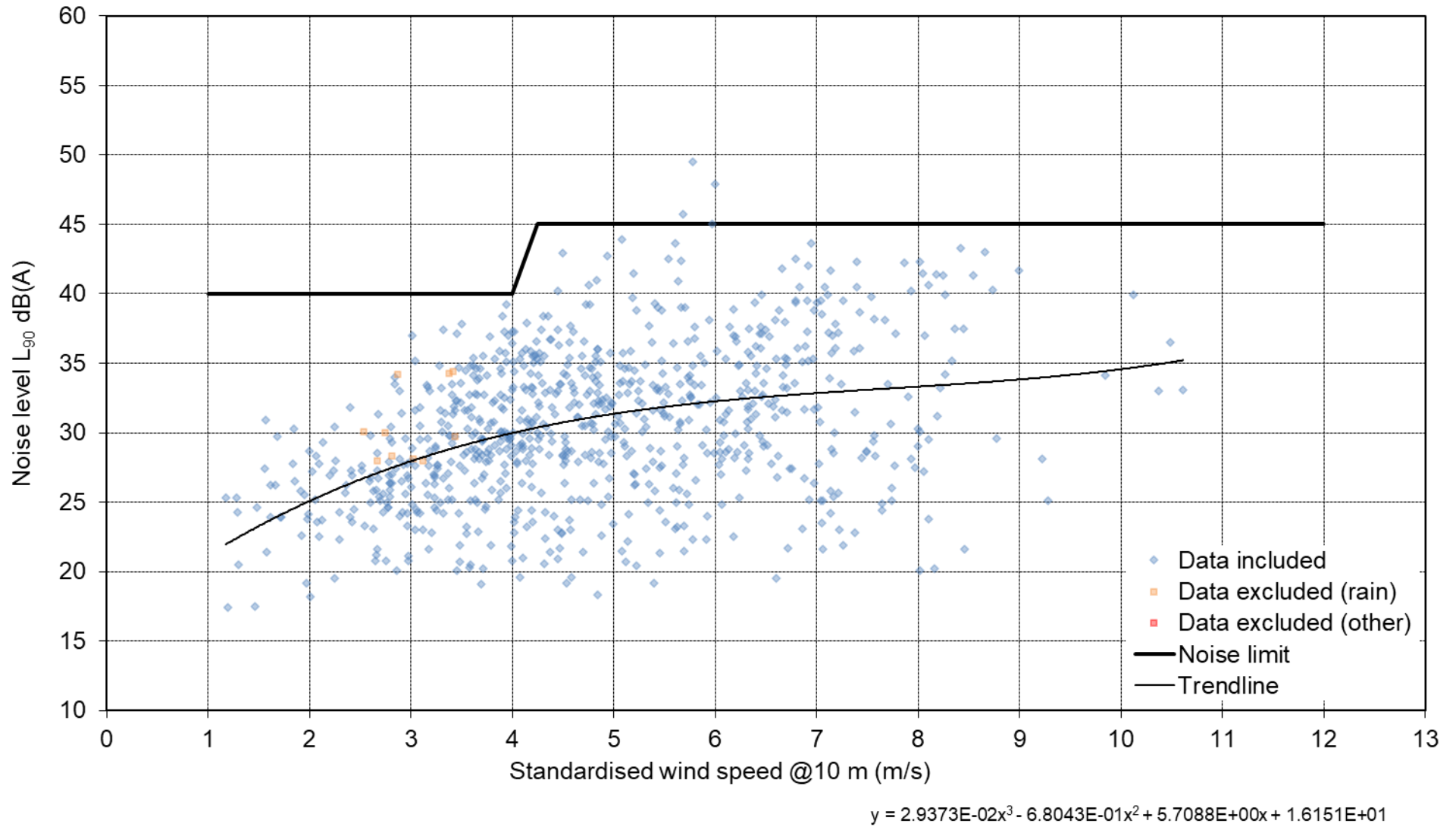


$$y = 9.1226E-01x + 2.4199E+01$$

Graph 9-14 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML6



Graph 9-15 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML7



Graph 9-16 – Background Noise Data During Baseline Noise Survey – Night-time Period – NML7

