

# Appendix E

## Noise & Vibration



## APPENDIX E1

Details the prevailing background noise levels and derived limits for the Ballynakill scheme

**FTCO Maighne: Noise environment report**

**Ballynakill (Longwood): 5 NML locations**

<b>NML No.</b>	<b>Potential predominant noise environment</b>
LO1	Road traffic.
LO2	Agricultural traffic.
LO3	Residential with dogs.
LO4	Residential.
LO5	Road traffic.

Greenwire

Phase 3 Installations - Ballynakill (Longwood)

LO1a	LO1b
GPS: 53.437087,-6.958794	GPS: 53.437087,-6.958794
	

LO4	LO2 – LO2 was checked on Dec 21 but on Jan 3 was discovered to have been knocked over by livestock
GPS: 53.431884,-6.923545	GPS: 53.430082,-6.939136
	

LO5a	LO5b
GPS: 53.435968,-6.987541	GPS: 53.435968,-6.987541
	

LO5 Note: Original Location was unsuitable. Equipment was set up after sunset.

LO5 Mast	LO3
GPS: 53.437202,-6.975074	GPS: 53.451402,-6.95904
	

## APPENDIX E2

Details the prevailing background noise levels and derived limits for the Windmill scheme

**FTCO Maighne: Noise environment report**

**Windmill: 1 NMT location**

<b>NML No.</b>	<b>Potential predominant noise environment</b>
WO1	Agricultural traffic and dogs.

**FTCO Maighne - Windmill location**

**Installation Report - 1 x 10m weather mast and 1 NM location**

Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
Wind 1	10m met mast	N/A	05/10/2014	16:40	53.385286, -6.965733





Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
W01	3002365	4952	06/11/2014	15:20	53.391036, -6.976808





## APPENDIX E3

Details the prevailing background noise levels and resultant noise limits for dwellings neighbouring the proposed Drehid-Hortland scheme



**FTCO Maighne: Noise environment report**

**Drehid & Hortland: 7 NML locations**



<b>NML No.</b>	<b>Potential predominant noise environment</b>
DR1	Residential.
DR2	Residential.
DR3	Residential.
DR4	Residential.
HO1	Agricultural.
HO2	Residential.
HO3	Agricultural.

Greenwire

Phase 3 Installations (Drehid & Hortland)

DR1a	DR1b
GPS: 53.350702,-6.902657	GPS: 53.350702,-6.902657
	

DR2a – (DR3 on Jose’s notes but DR2 on map)	DR2b
GPS: 53.362231,-6.886314	GPS: 53.362231,-6.886314
	

DR3a – (DR2 on Jose’s notes but DR3 on map)	DR3b
GPS: 53.363598,-6.90244	GPS: 53.363598,-6.90244
	

DR4a	DR4b
GPS: 53.382133, -6.867600	GPS: 53.382133, -6.867600
	

Drehid Mast
GPS: 53.346942, -6.908711


HO1a	HO1b
GPS: 53.376015,-6.784465	GPS: 53.376015,-6.784465
	

HO2a (originally HO4)	HO2b (originally HO4)
GPS: 53.371861,-6.838493	53.371861,-6.838493
	

HO2 Mast	
GPS: 53.372651,-6.837110	
	

HO3a	HO3b
GPS: 53.382746,-6.797348	GPS: 53.382746,-6.797348





## APPENDIX E4

Details the prevailing background noise levels and noise limits derived for dwellings neighbouring the Derrybrennan scheme

**FTCO Maighne: Noise environment report**

**Derrybrennan: 1 NML locations**

<b>NML No.</b>	<b>Potential predominant noise environment</b>
DEB1	Road traffic

**Greenwire**

**Phase 3 – Installation Report (Cloncumber, Derrybrennan, Drehid-Timahoe, Drehid and Timahoe)**

Derrybrennan - Mast	Derrybrennan - Noise
GPS: 53.293362,-6.946449	GPS: 53.277121,-6.941696
	

## APPENDIX E5

Details the prevailing background noise levels and noise limits derived for dwellings neighbouring the Cloncumber scheme

**FTCO Maighne: Noise environment report**

**Cloncumber: 8 NML locations**

<b>NML No.</b>	<b>Potential predominant noise environment</b>
CL1	Agricultural.
CL2	Agricultural.
CL3	Residential.
CL4 (NML 1)	Residential.
CL5 (NML 2)	Agricultural.
CL6 (NML1)	Agricultural. Sheep grazing in close proximity to the noise monitor.
CL7 (NML2)	Road traffic and residential.
CL8 (NML3)	Road traffic and residential.

Greenwire

Phase 3 – Installation Report (Cloncumber)

CL1a	CL1b
GPS: 53.275168,-6.892993	GPS: 53.275168,-6.892993
	

CL2 – Noise	CL2 – Mast (shown in background)
GPS: 53.254059,-6.902719	GPS: 53.254778,-6.903598
	

CL3a	CL3b
GPS: 53.243508,-6.927229	GPS: 53.243508,-6.927229
	

**FTCO Maighne - Cloncumber location**

**Installation Report - 1 x 10m weather mast and 2 NM location**

Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
Mast1 John Payne	10m met mast	N/A	12/11/2014	13:30	53.25049, -6.91995





Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
NML1 Val Cross	3001350	4952 (2788846)	12/11/2014	11:30	53.25542, -6.92830



Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
NML2 Seamus Brennan	2580156	4952 (2821418)	12/11/2014	10:40	53.27113, -6.87465



**FTCO - Cloncumber location**

**Installation Report - 1 x 10m weather mast and 3 NM location**

Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
Mast1 John Payne	10m met mast	N/A	21/01/2015	13:40	53.25041, -6.91946



Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
CL6 NML1	2151874	UA1404 (2057894)	21/01/2015	12:00	53.25918, -6.88444



Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
CL7 NML2	2590900	UA1404 (1773652)	21/01/2015	14:00	53.24257, -6.95052



Location	SLM S/N	MIC	Install Date	Install Time	GPS NMT
CL8 NML3	2125128	UA1404 (2057896)	21/01/2015	14:50	53.24901, -6.94668



## APPENDIX E6

Results of the noise predictions/results are provided in tabular form, for dwelling locations supplied by Element Power

Figure 1

### Cloncumber Wind Farm Noise Assessment CL1 - Background Noise & Limits vs Wind Speed Night-time Hours

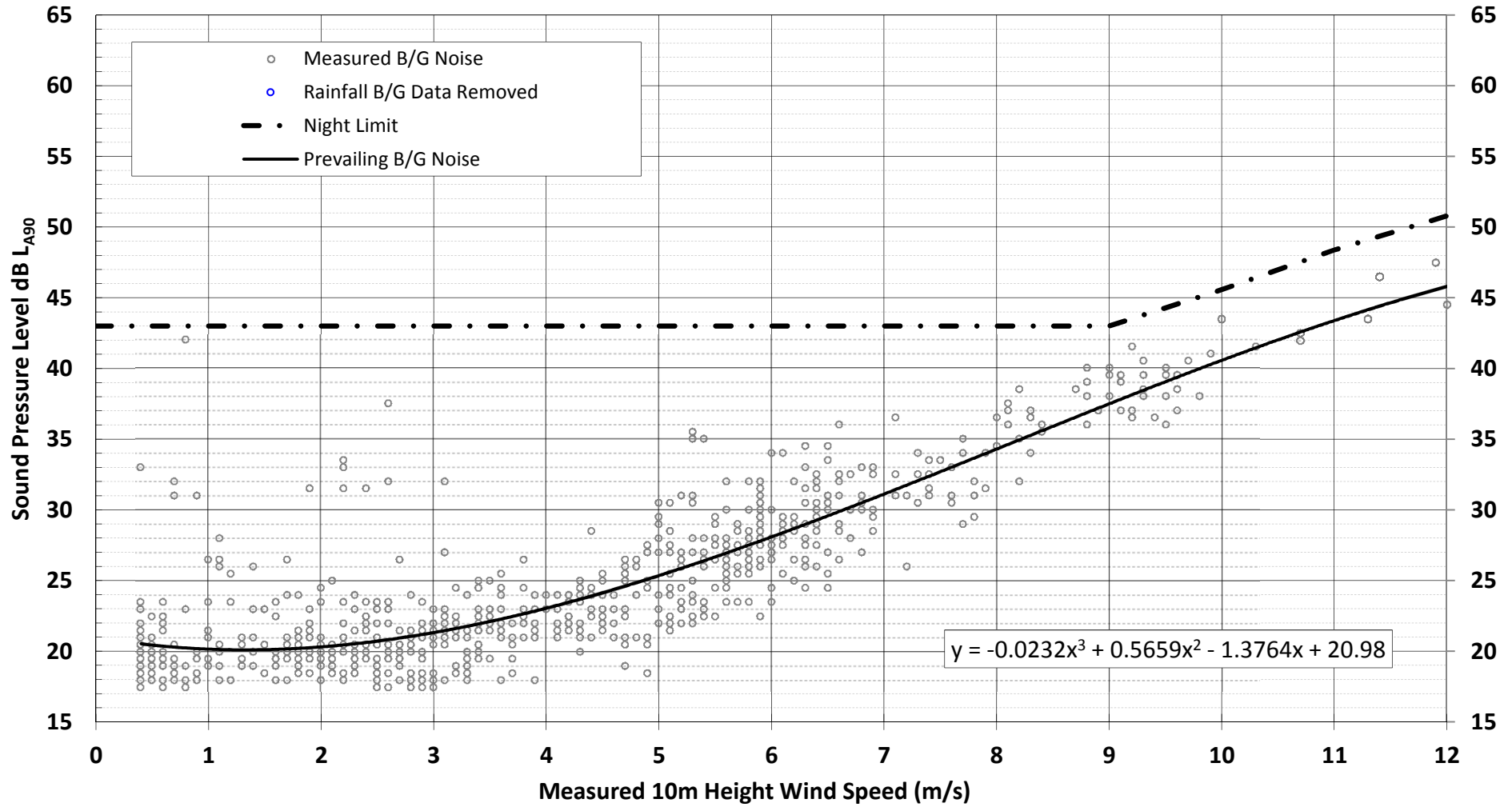




Figure 2

### Cloncumber Wind Farm Noise Assessment CL1 - Background Noise & Limits vs Wind Speed Daytime Hours

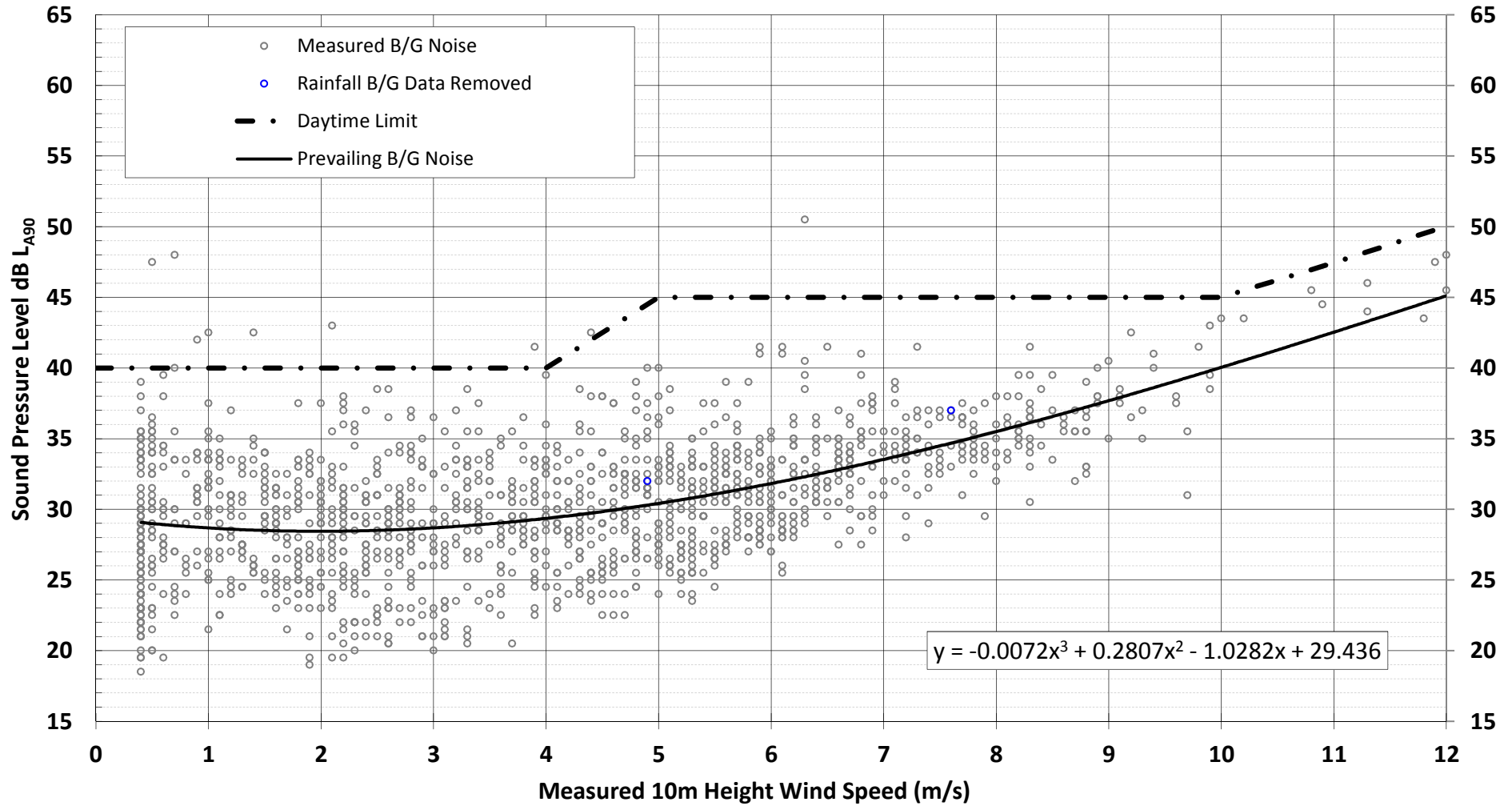


Figure 3

### Cloncumber Wind Farm Noise Assessment CL2 - Background Noise & Limits vs Wind Speed Night-time Hours

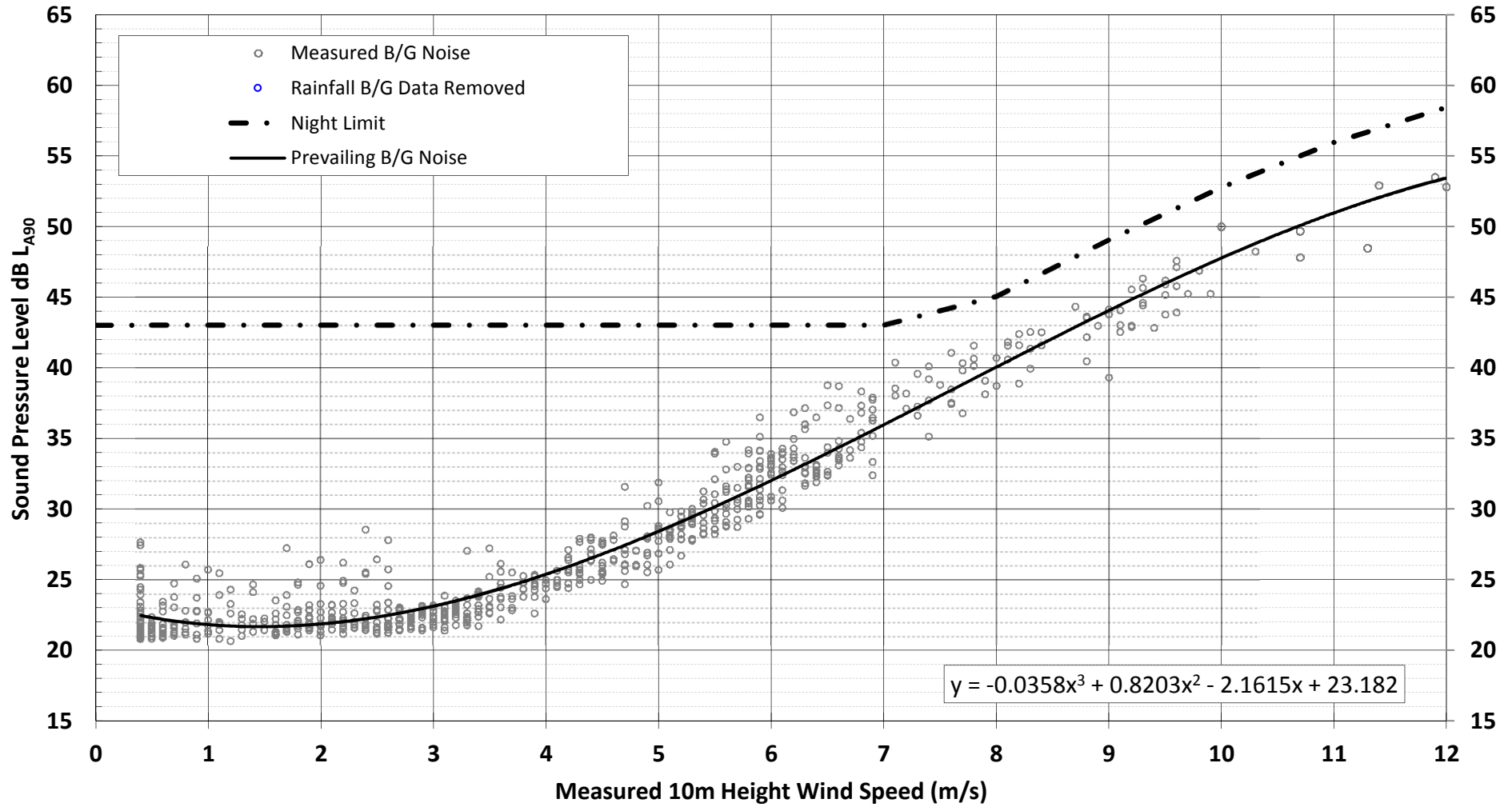


Figure 4

### Cloncumber Wind Farm Noise Assessment CL2 - Background Noise & Limits vs Wind Speed Daytime Hours

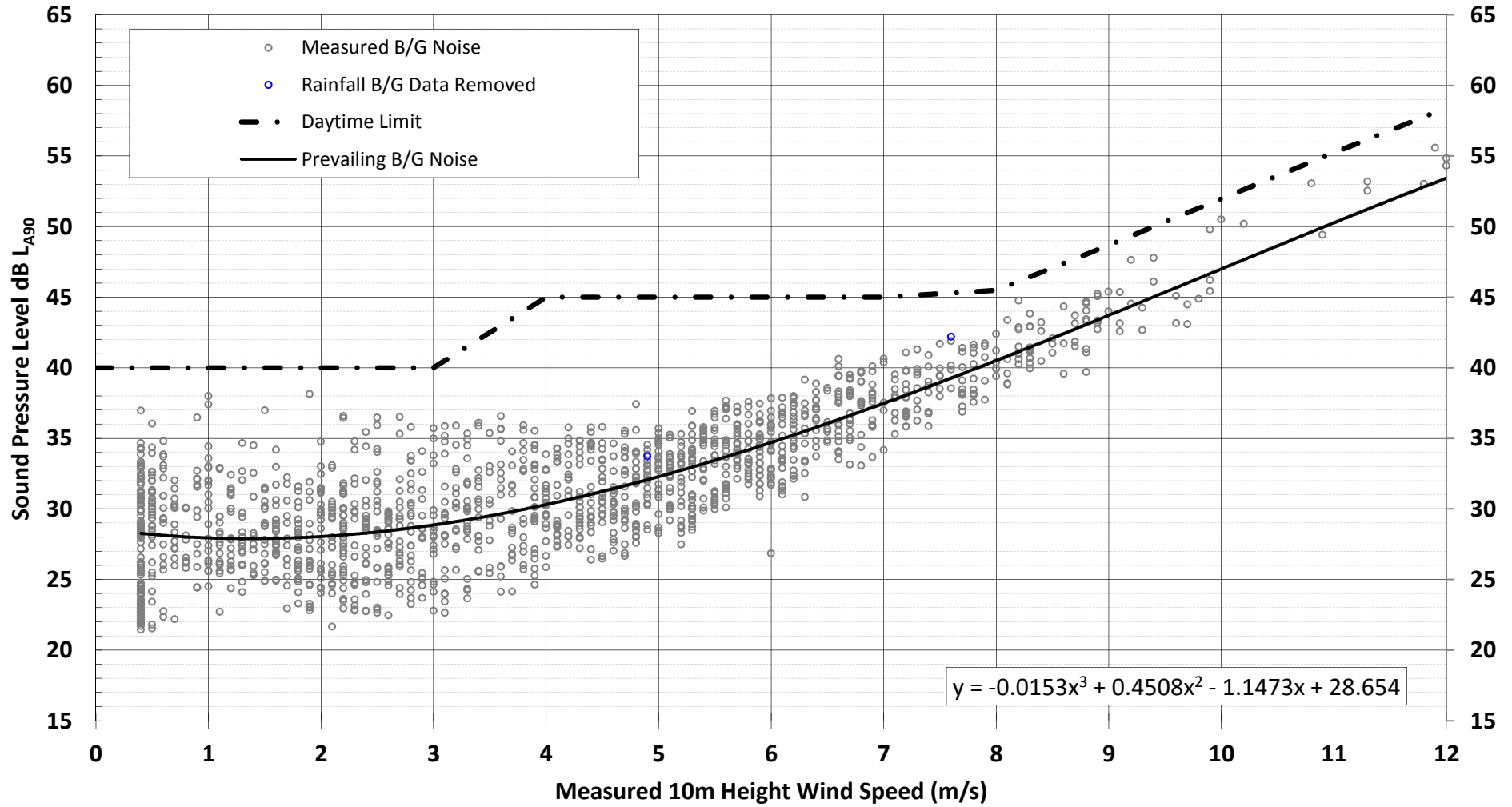


Figure 5

### Cloncumber Wind Farm Noise Assessment CL3 - Background Noise & Limits vs Wind Speed Night-time Hours

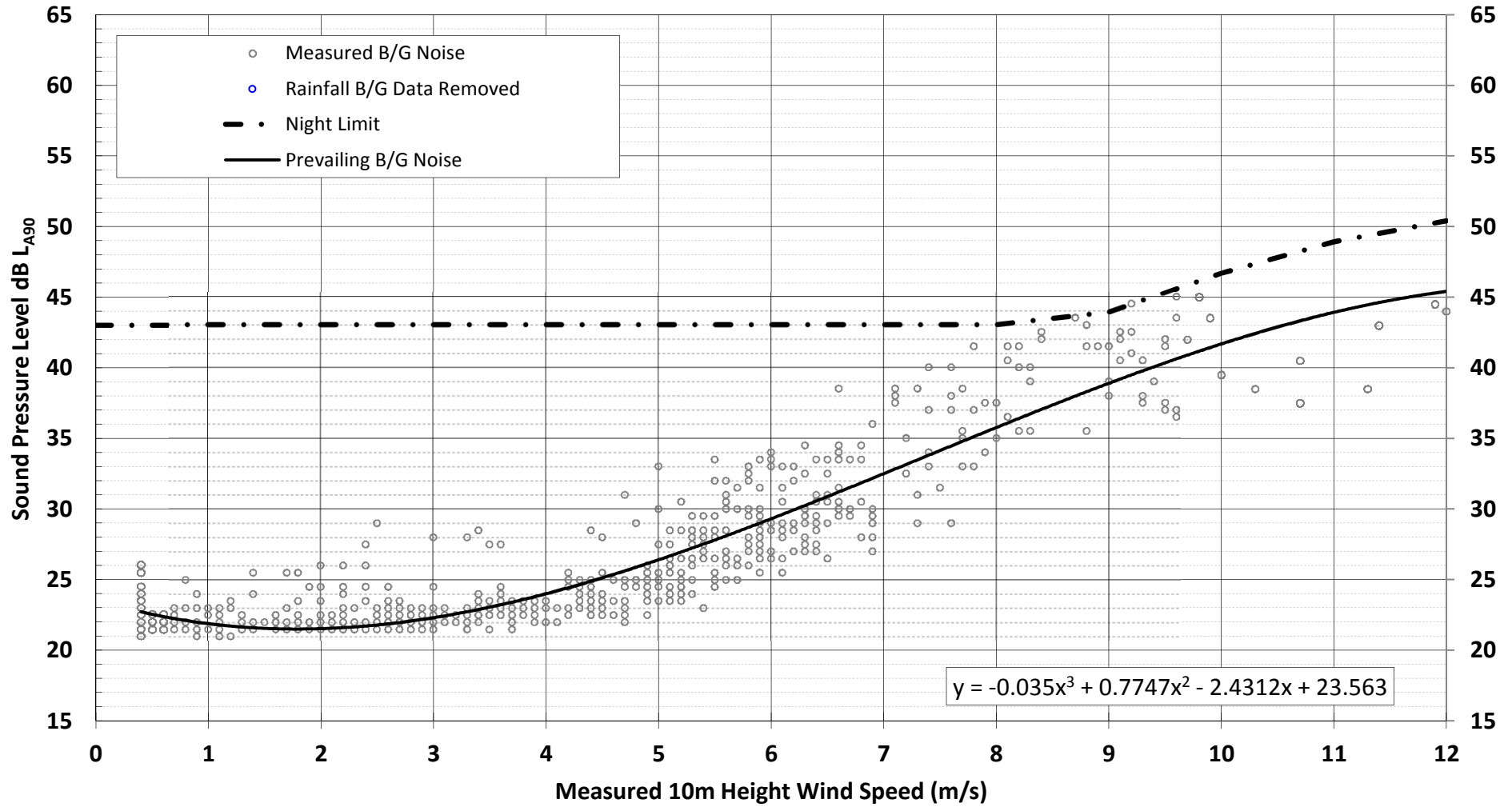


Figure 6

### Cloncumber Wind Farm Noise Assessment CL3 - Background Noise & Limits vs Wind Speed Daytime Hours

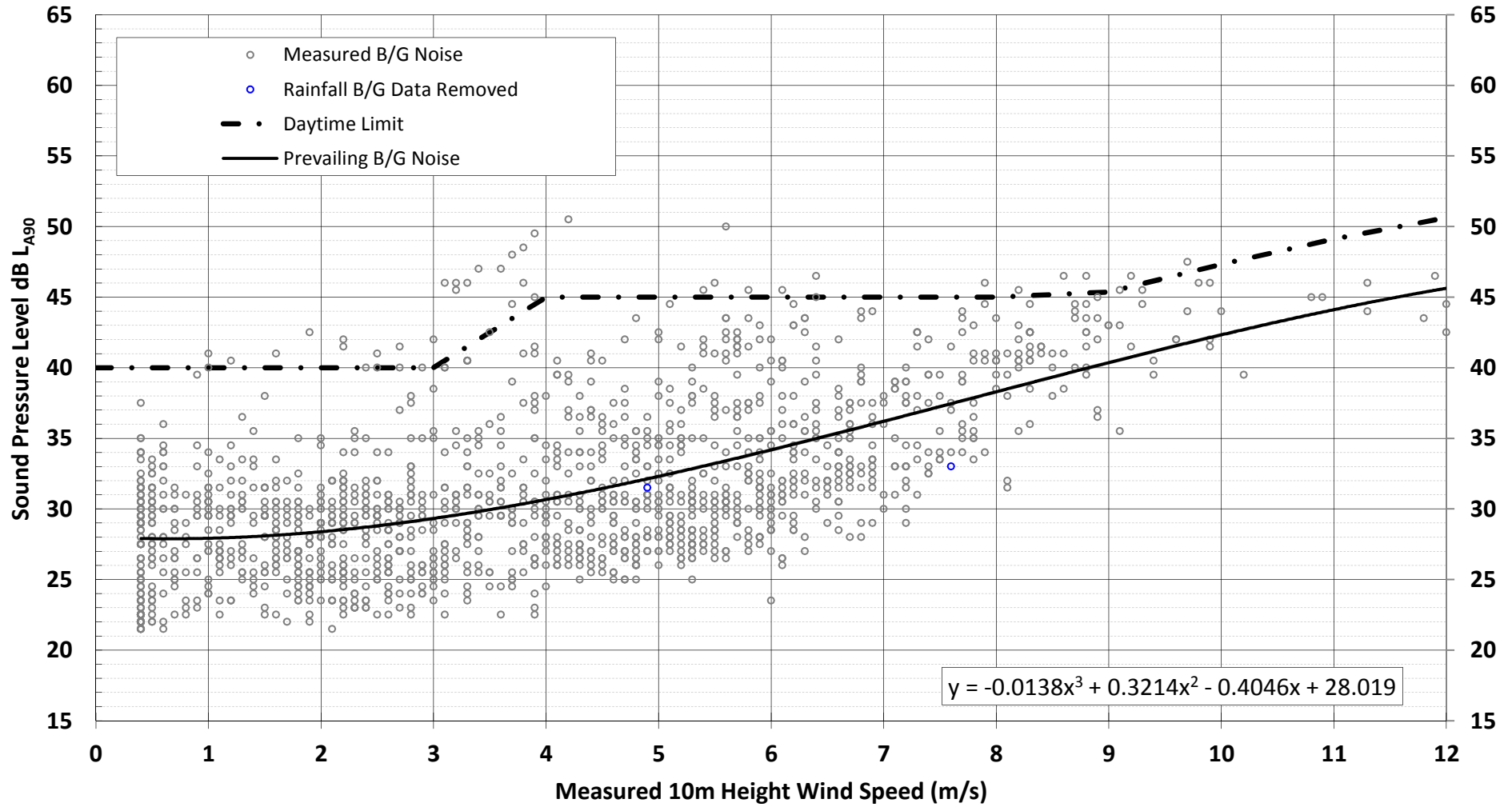


Figure 7

### Cloncumber Wind Farm Noise Assessment CL4 - Background Noise & Limits vs Wind Speed Night-time Hours

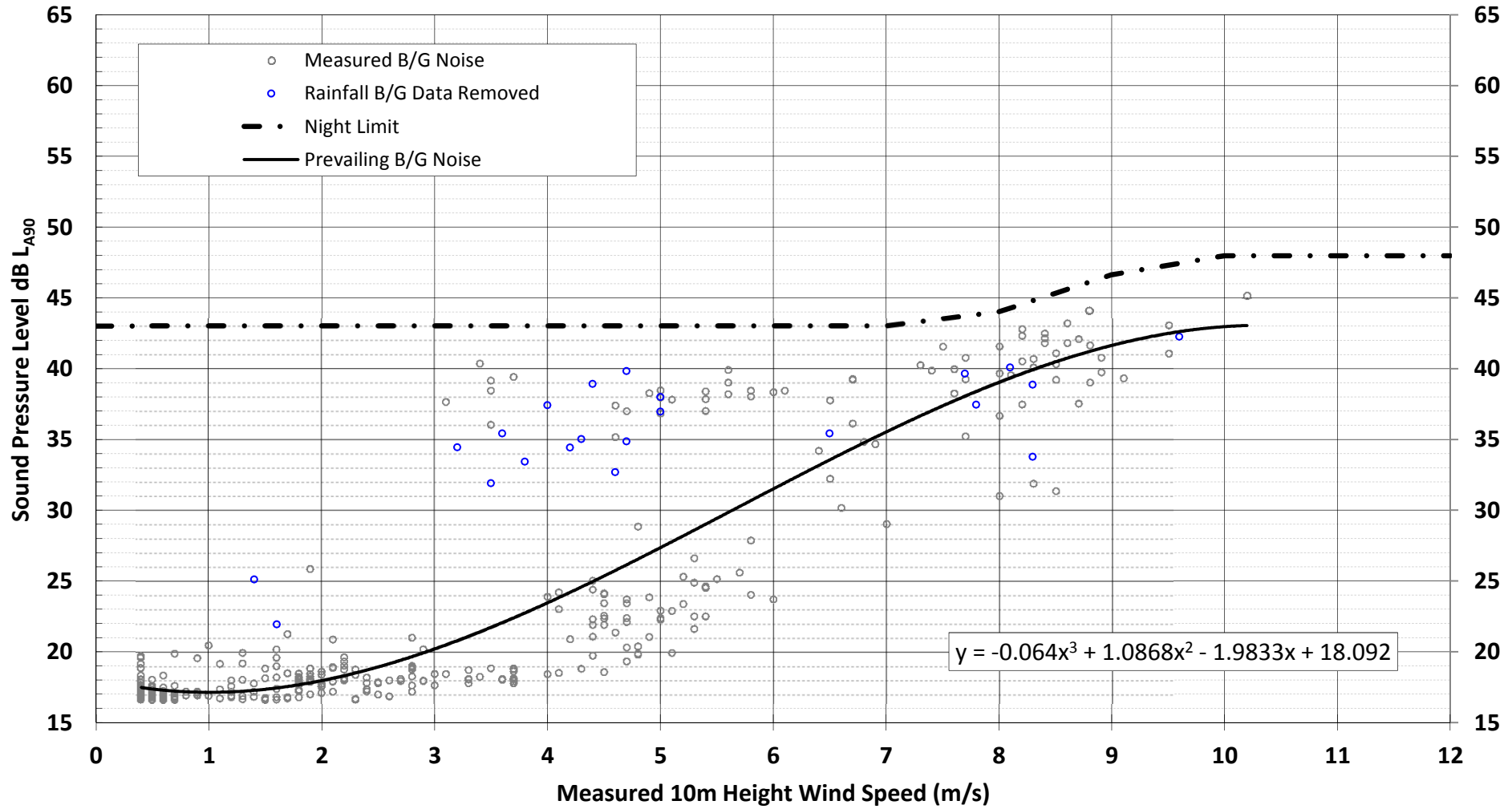


Figure 8

### Cloncumber Wind Farm Noise Assessment CL4 - Background Noise & Limits vs Wind Speed Daytime Hours

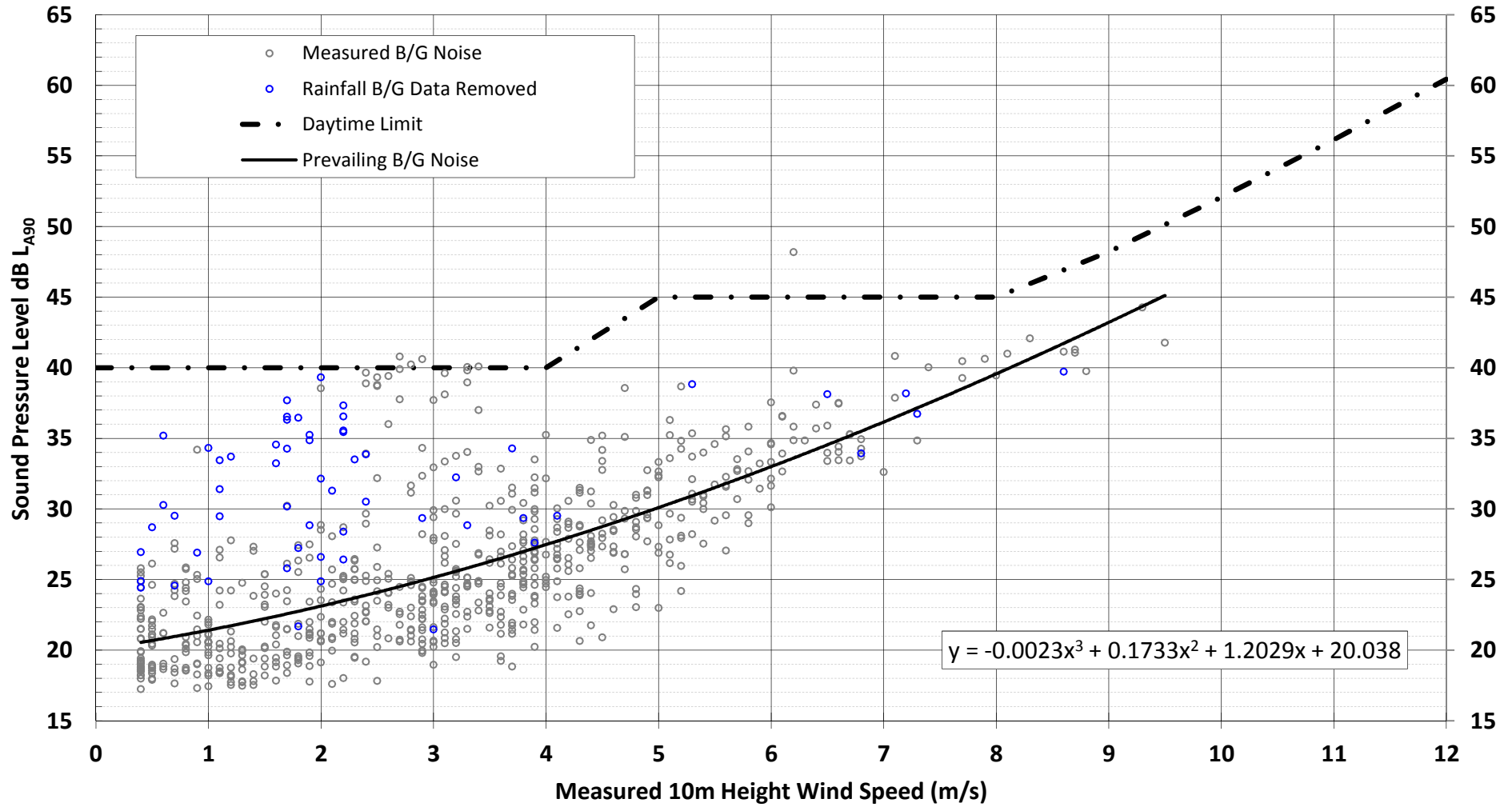


Figure 9

### Cloncumber Wind Farm Noise Assessment CL5 - Background Noise & Limits vs Wind Speed Night-time Hours

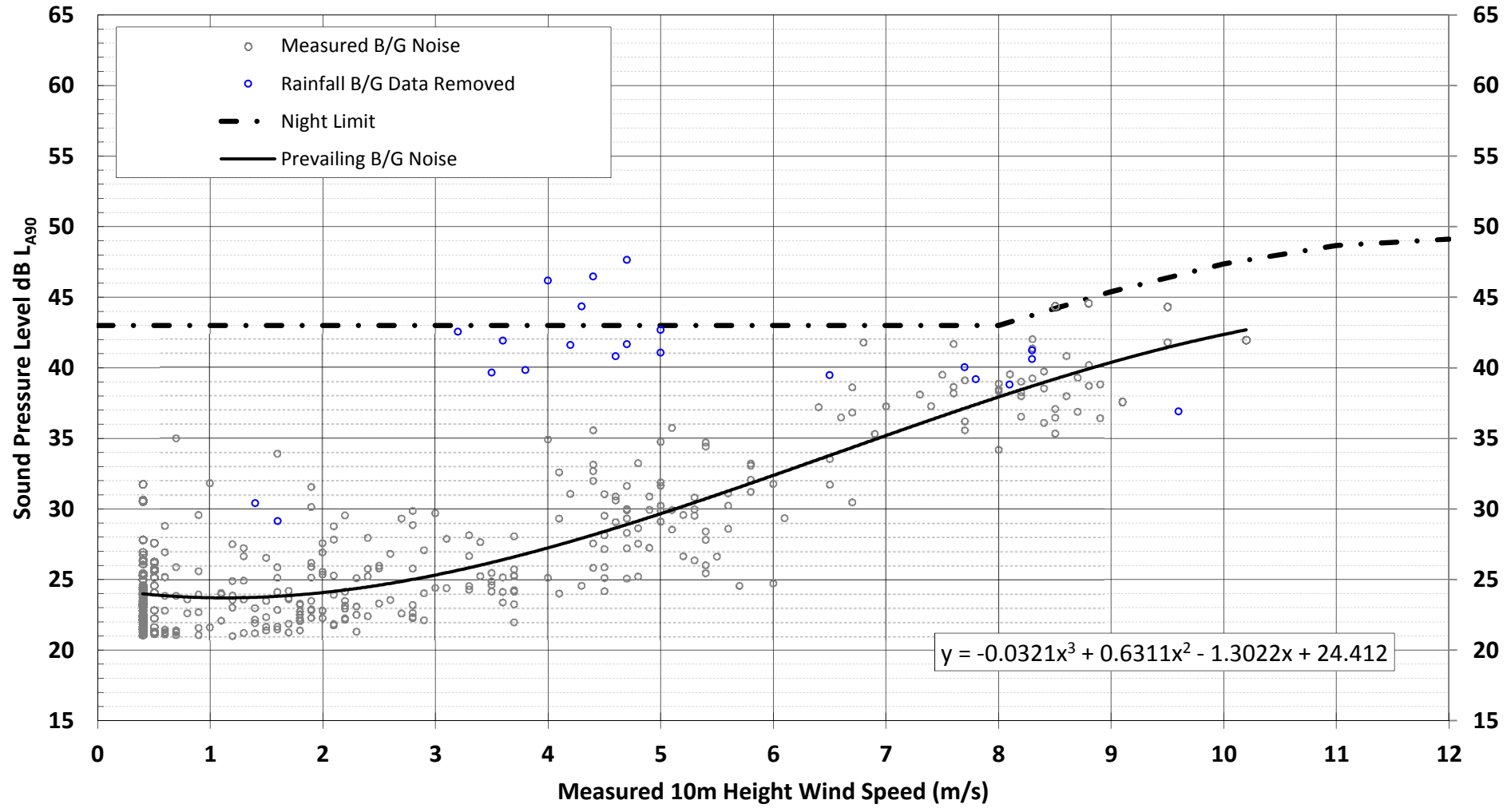
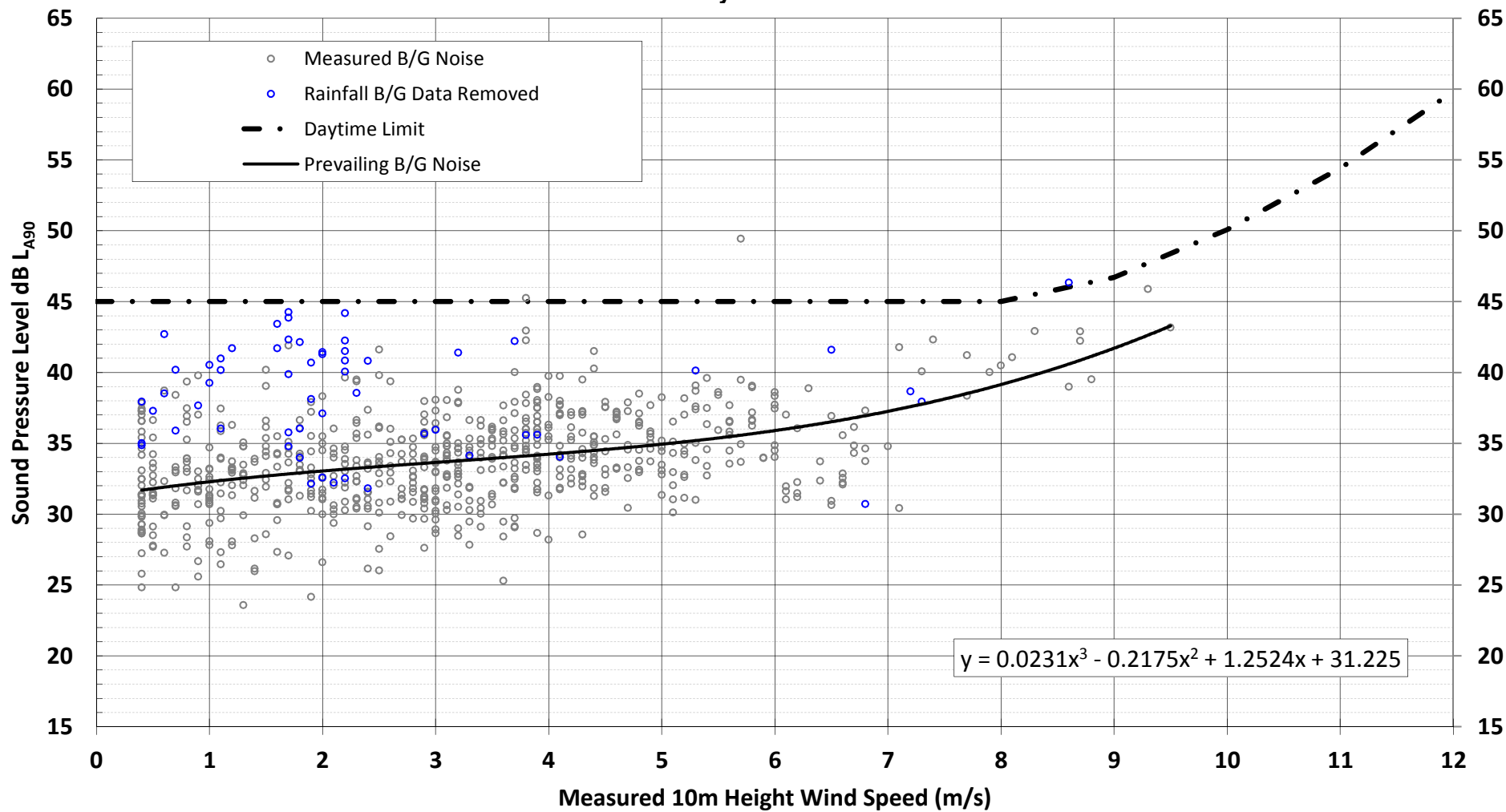




Figure 10

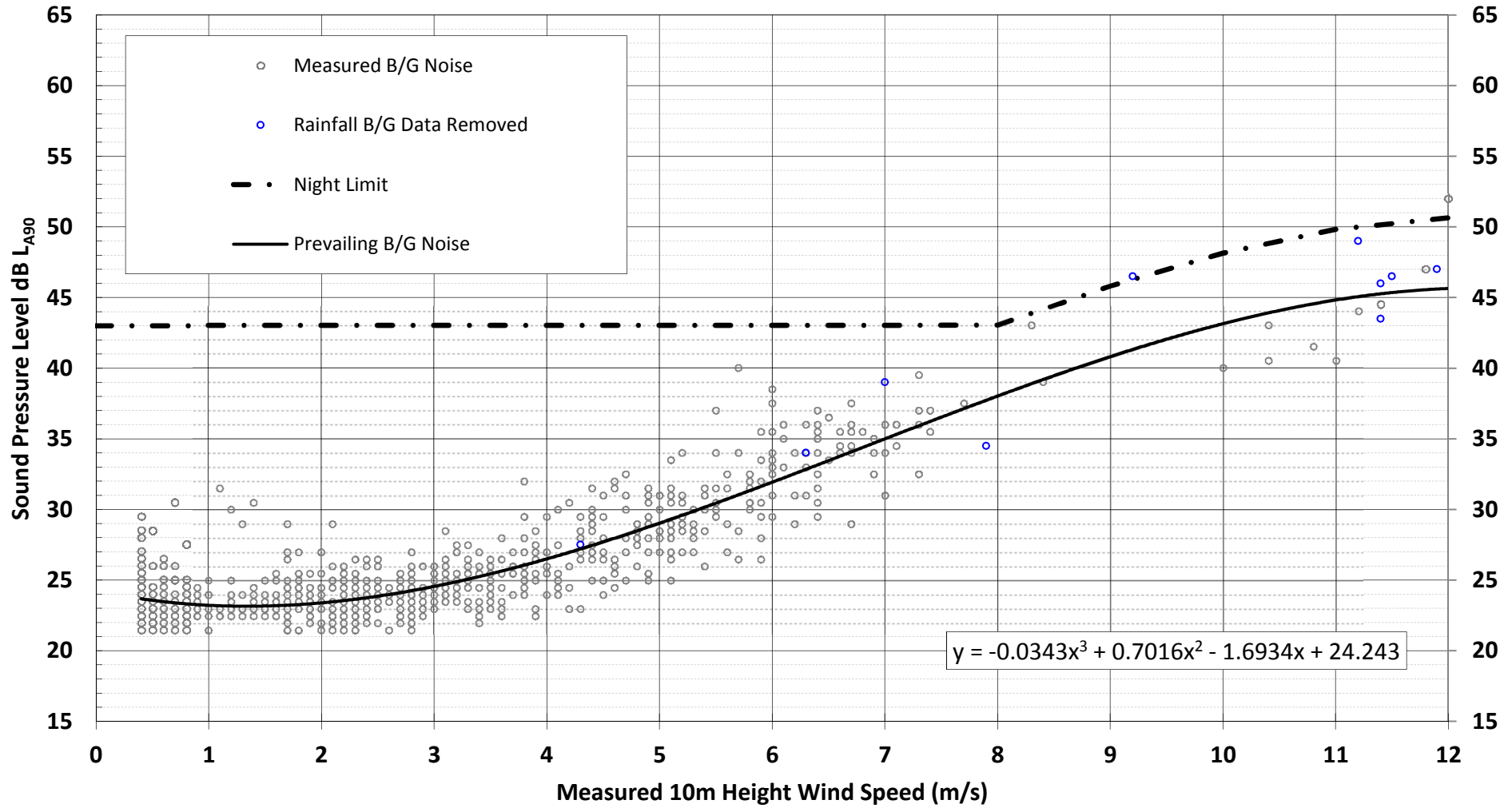
### Cloncumber Wind Farm Noise Assessment CL5 - Background Noise & Limits vs Wind Speed Daytime Hours



# Cloncumber Noise Assessment

## CL6 - Background Noise & Limits vs Wind Speed

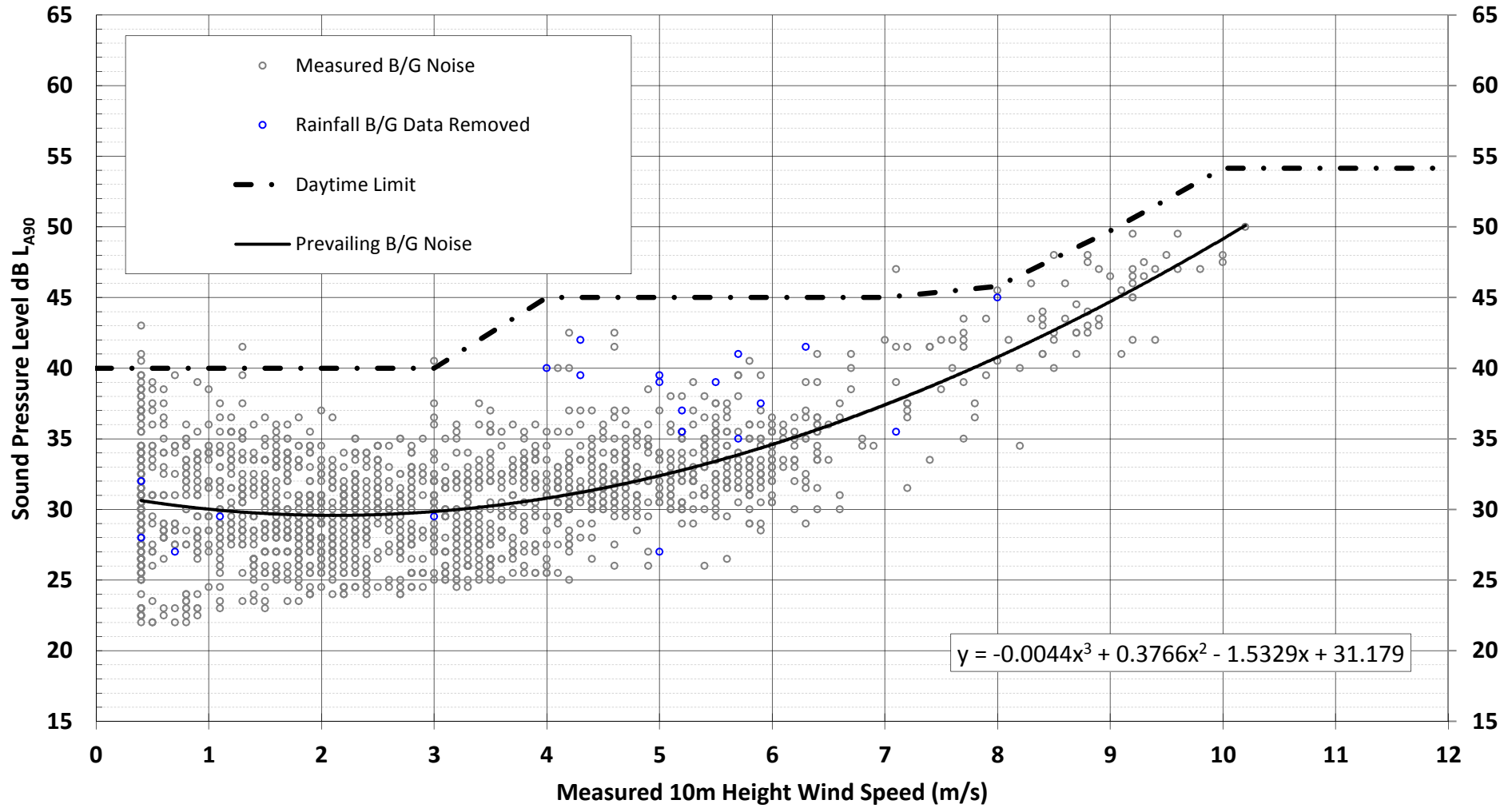
### Night-time Hours



# Cloncumber Noise Assessment

## CL6 - Background Noise & Limits vs Wind Speed

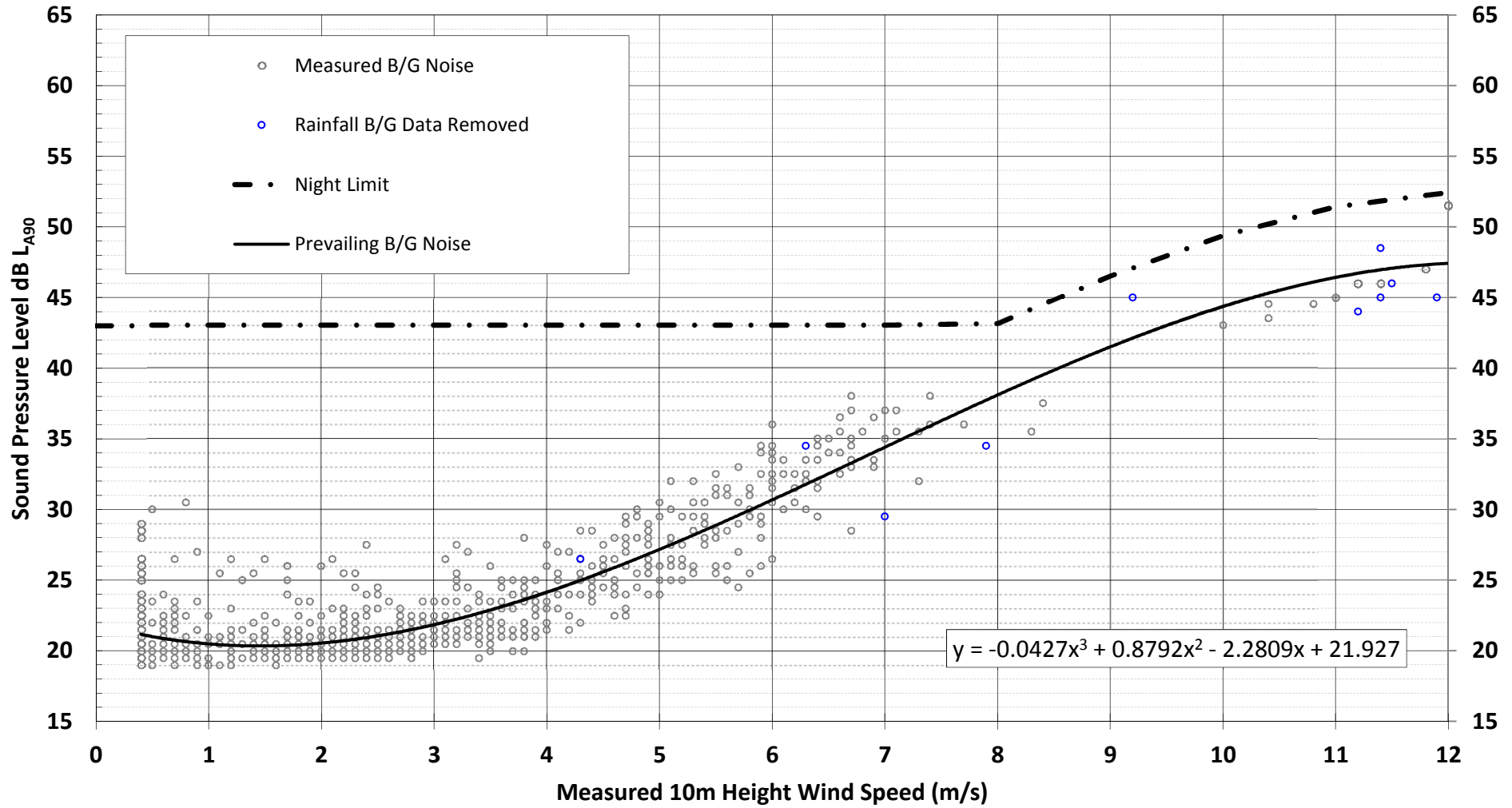
### Daytime Hours



# Cloncumber Noise Assessment

## CL7 - Background Noise & Limits vs Wind Speed

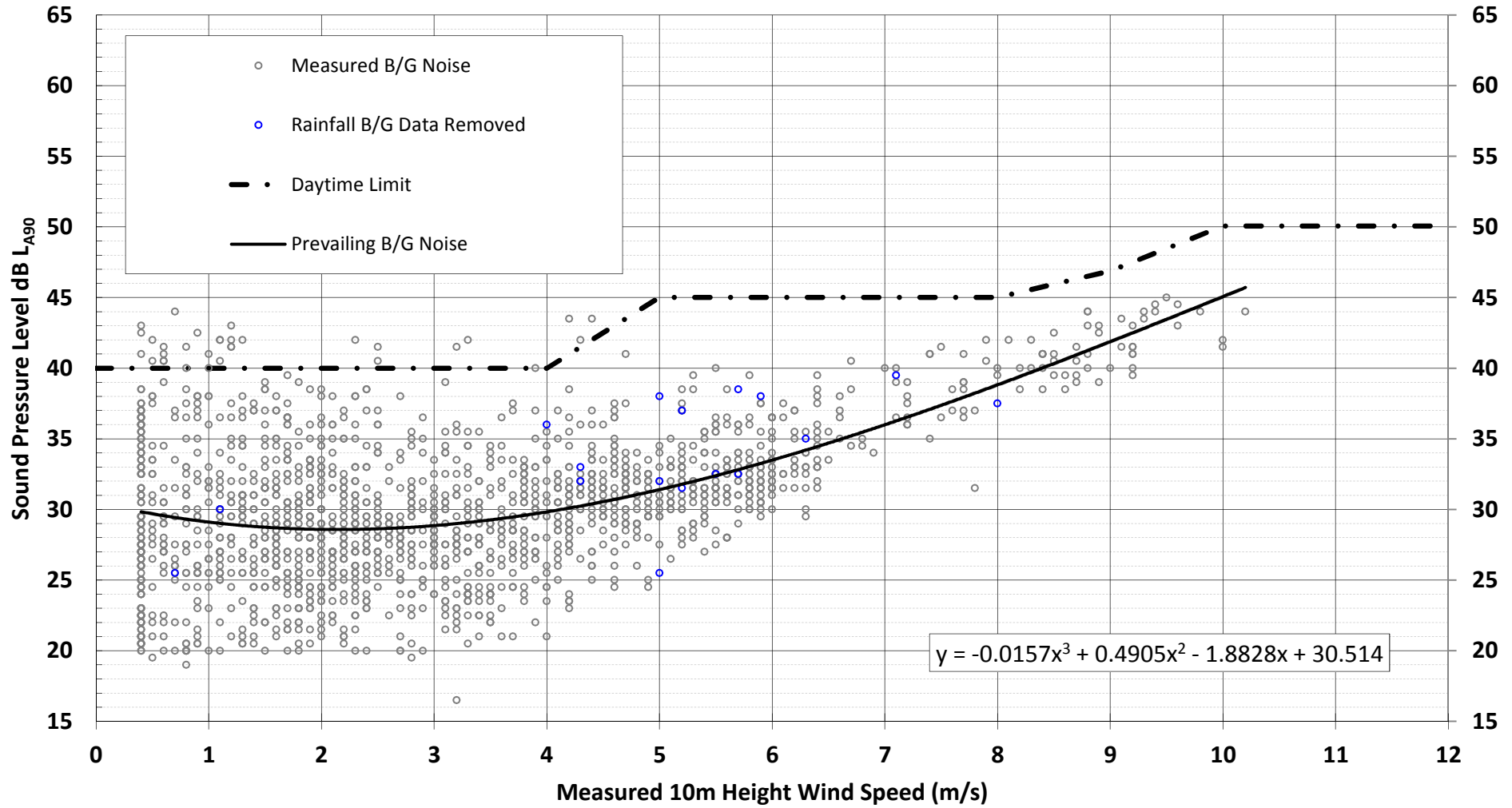
### Night-time Hours



# Cloncumber Noise Assessment

## CL7 - Background Noise & Limits vs Wind Speed

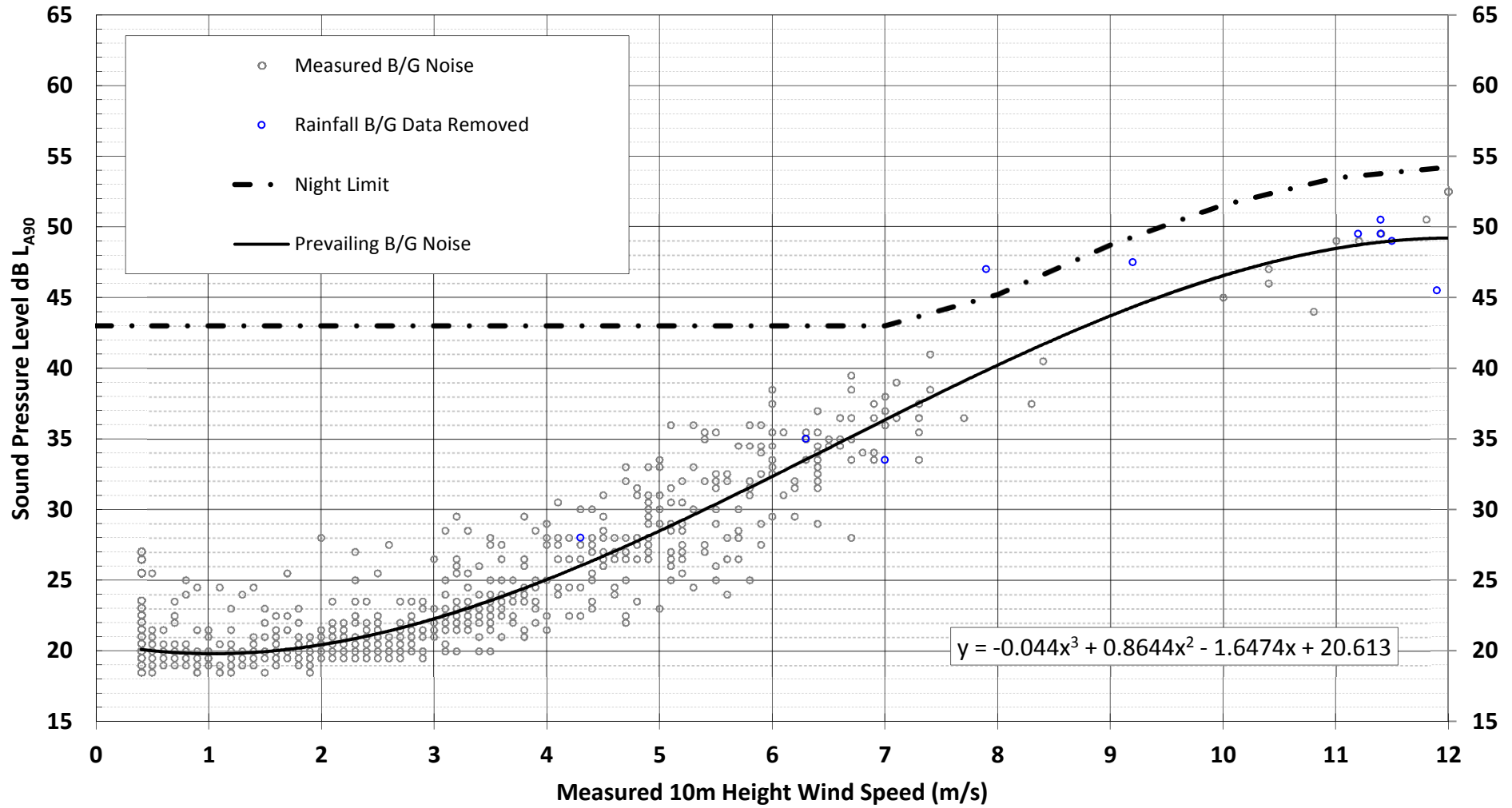
### Daytime Hours



# Cloncumber Noise Assessment

## CL8 - Background Noise & Limits vs Wind Speed

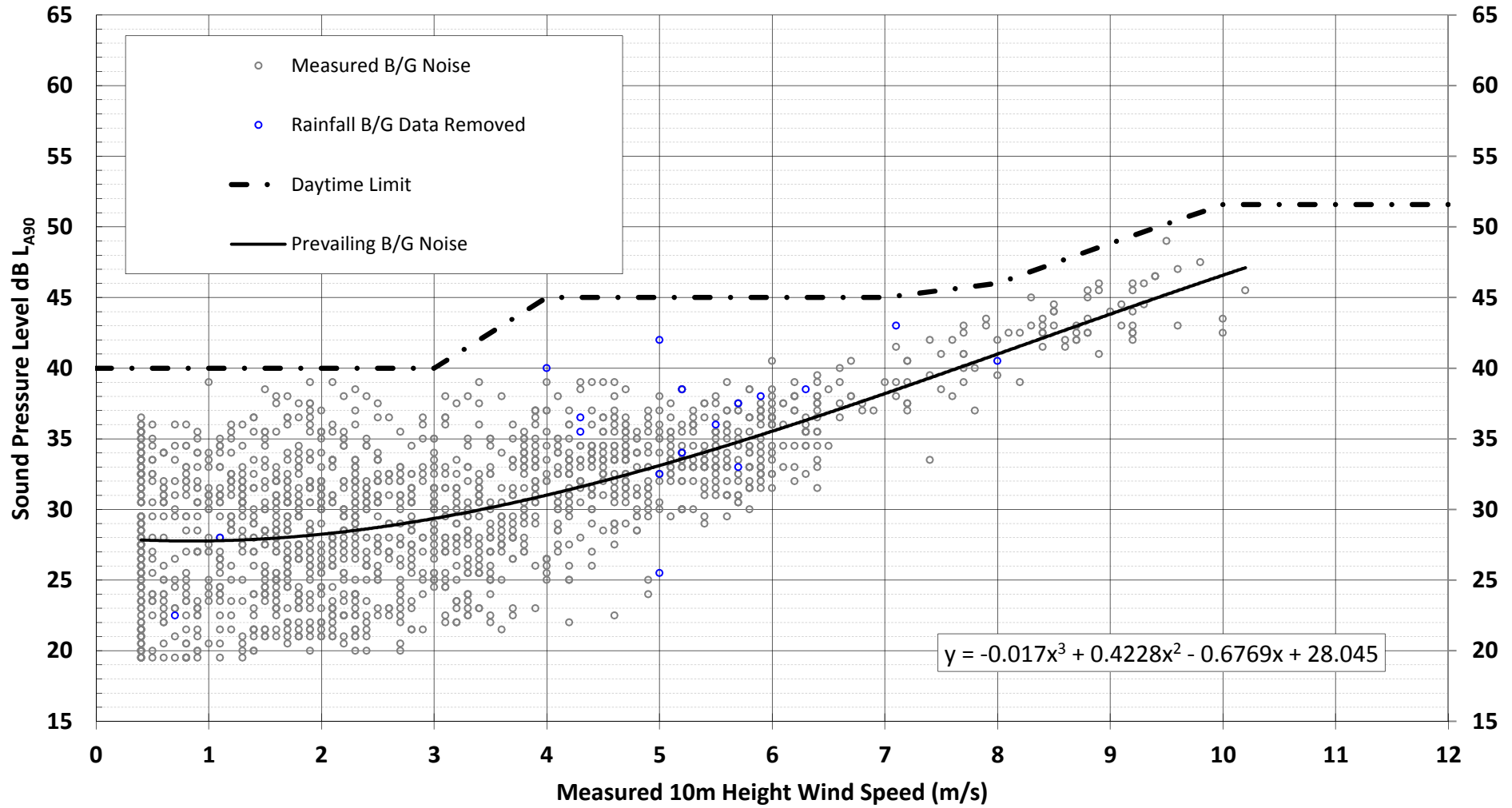
### Night-time Hours



# Cloncumber Noise Assessment

## CL8 - Background Noise & Limits vs Wind Speed

### Daytime Hours



## APPENDIX E7

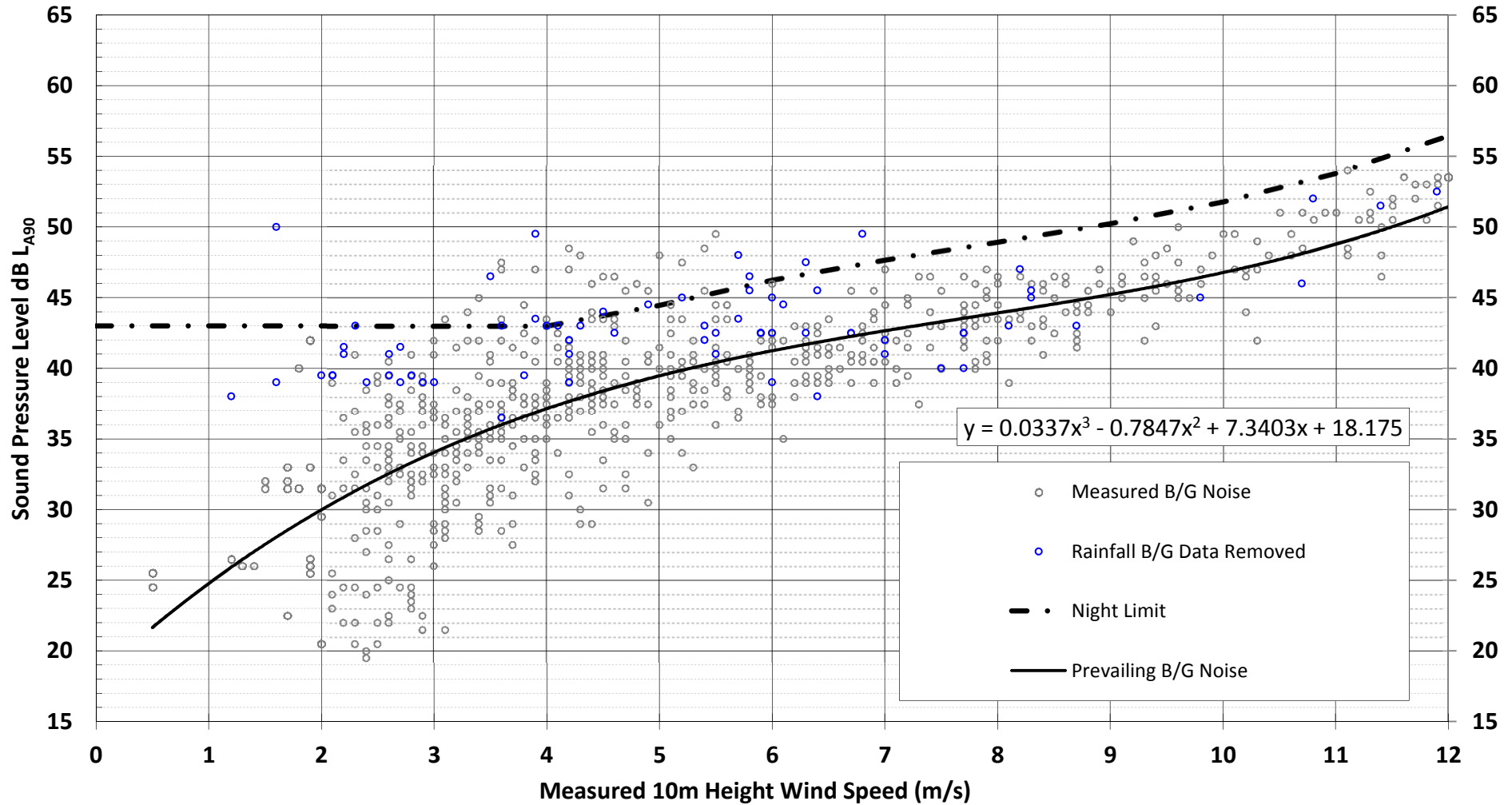
The Results of the predictions for the dwellings  
neighbouring the Wind Farm



# Ballynakill 2 Wind Farm Noise Assessment

## LO1 - Background Noise & Resultant Limits vs Wind Speed

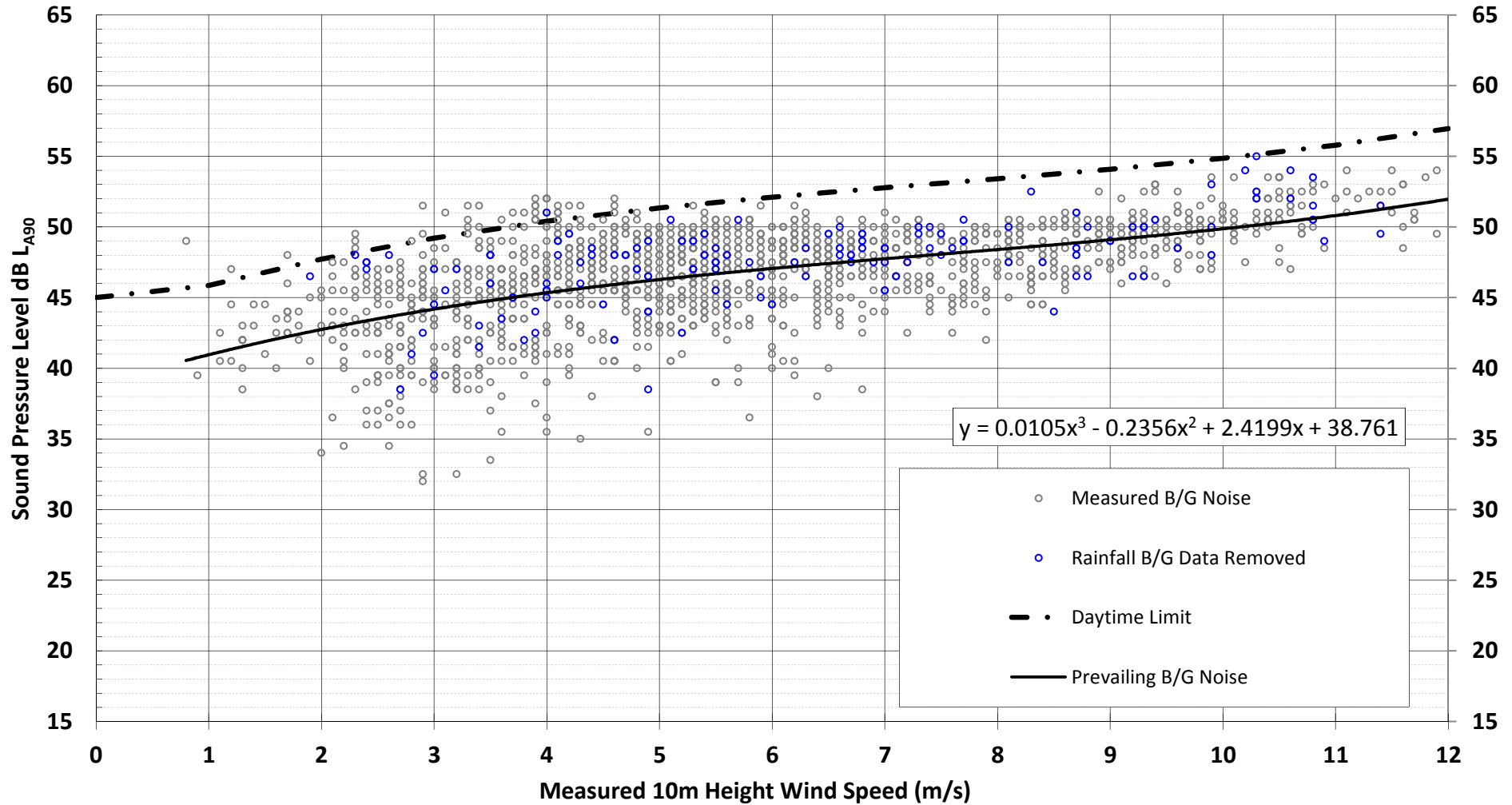
### Night-time Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO1 - Background Noise & Resultant Limits vs Wind Speed

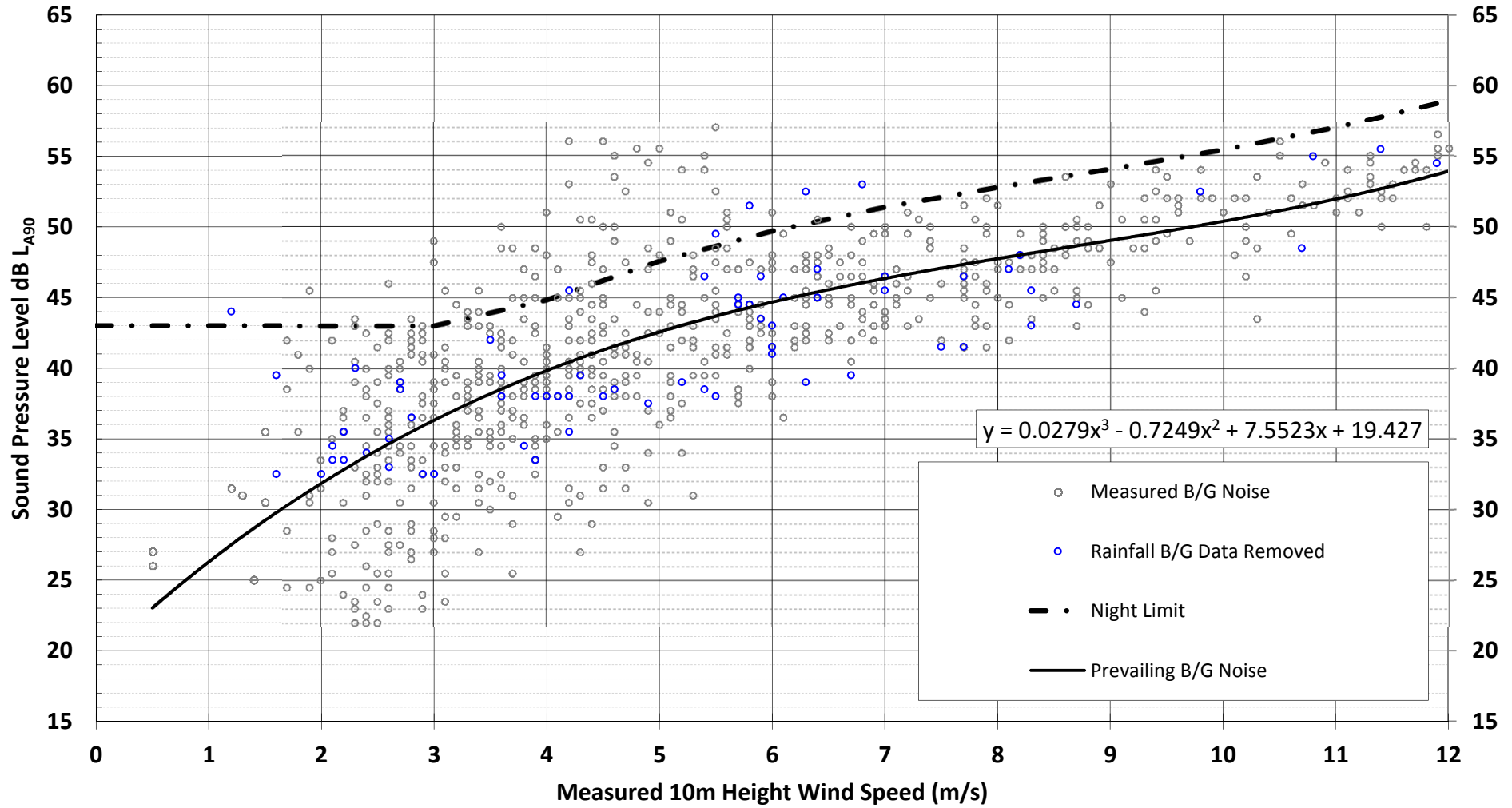
### Daytime Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO2 - Background Noise & Resultant Limits vs Wind Speed

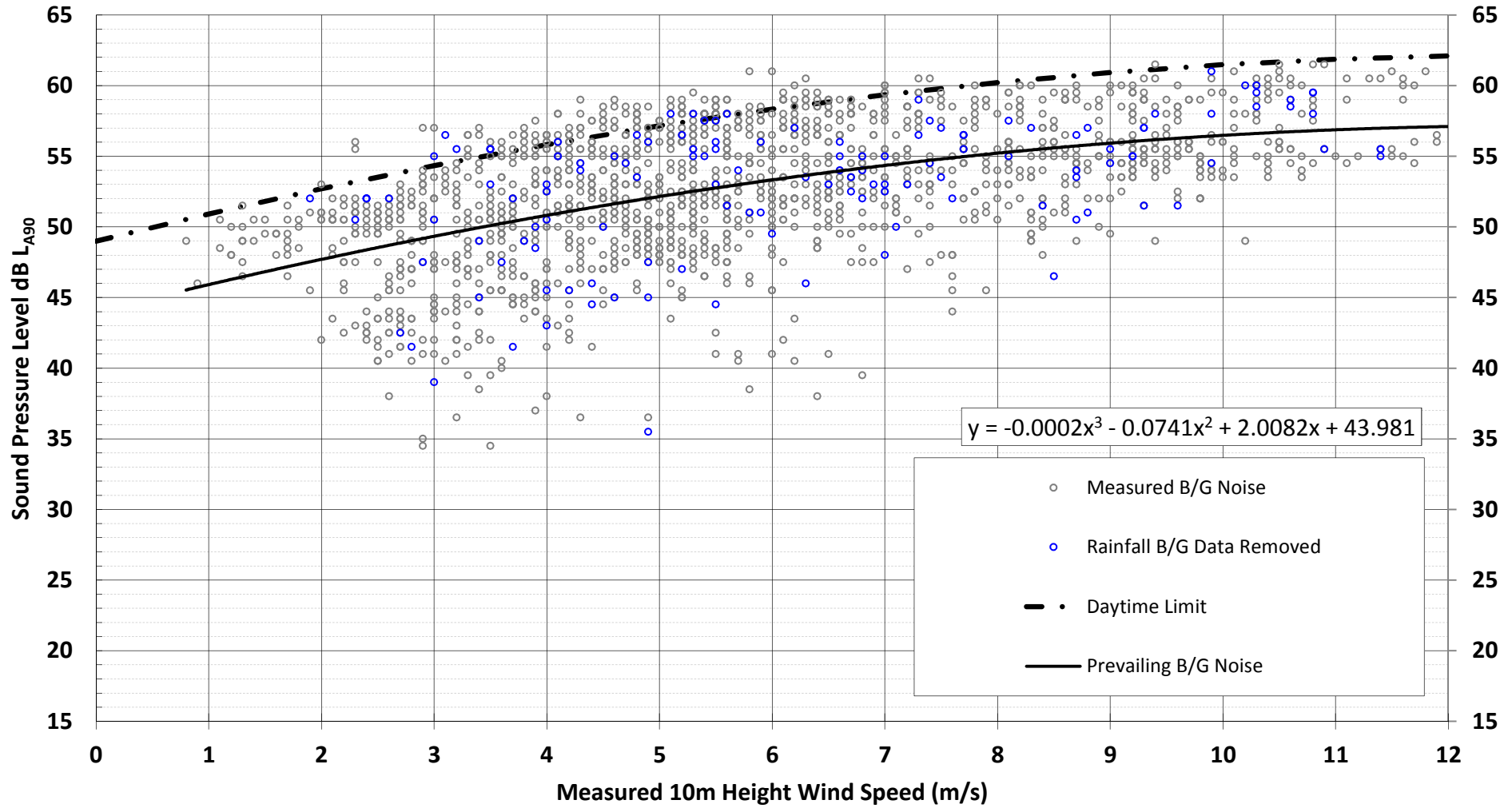
### Night-time Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO2 - Background Noise & Resultant Limits vs Wind Speed

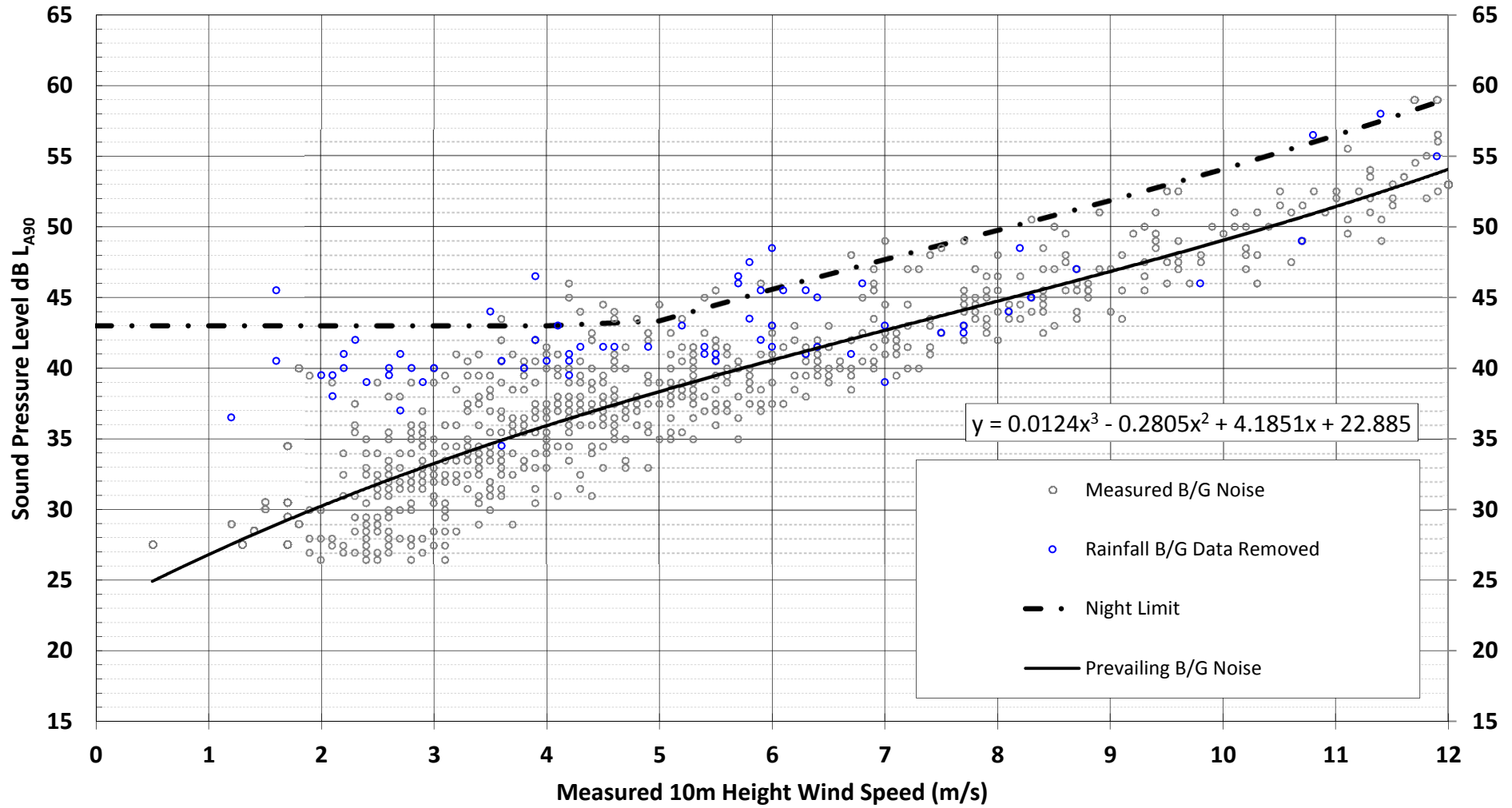
### Daytime Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO3 - Background Noise & Resultant Limits vs Wind Speed

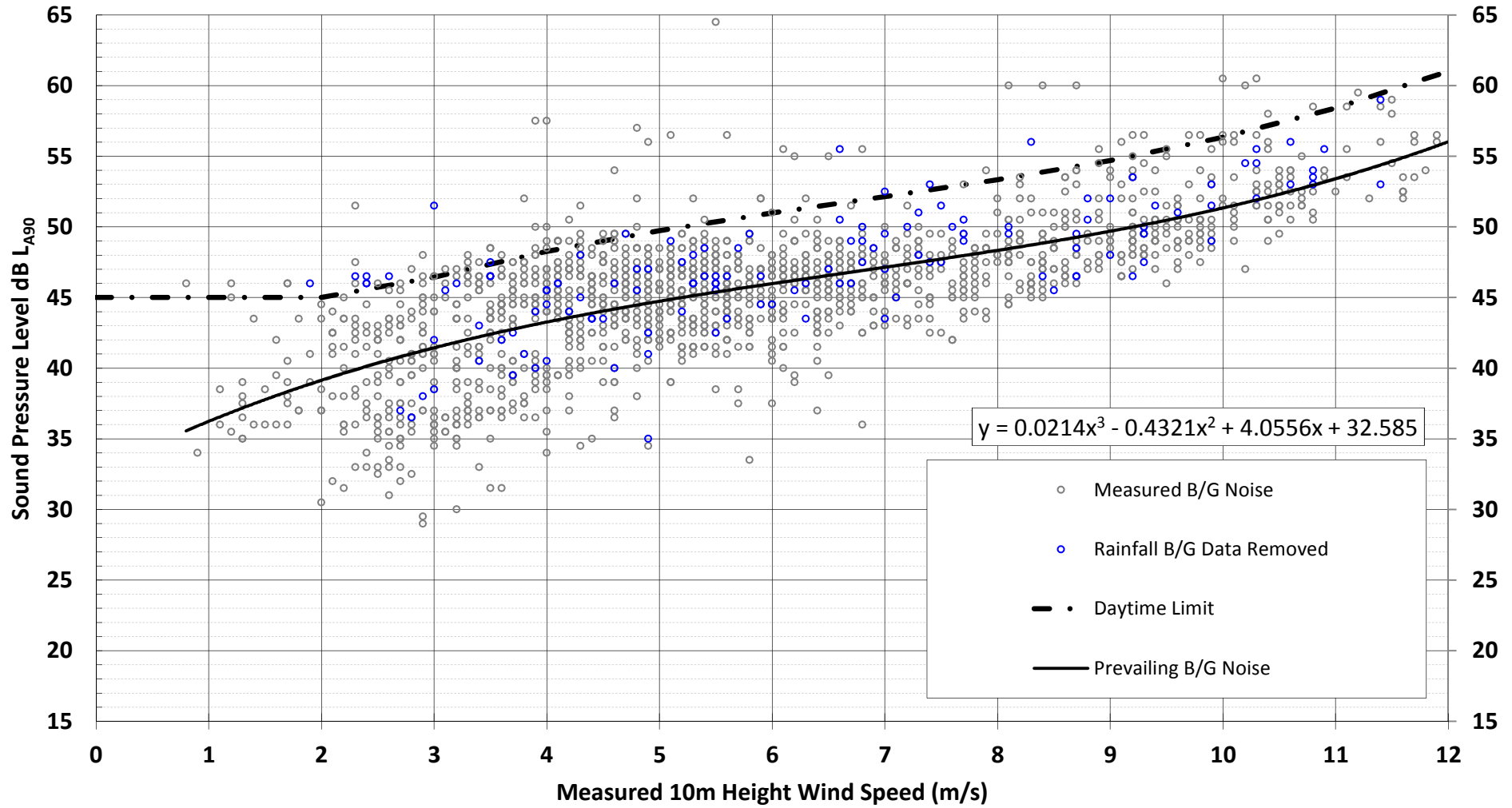
### Night-time Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO3 - Background Noise & Resultant Limits vs Wind Speed

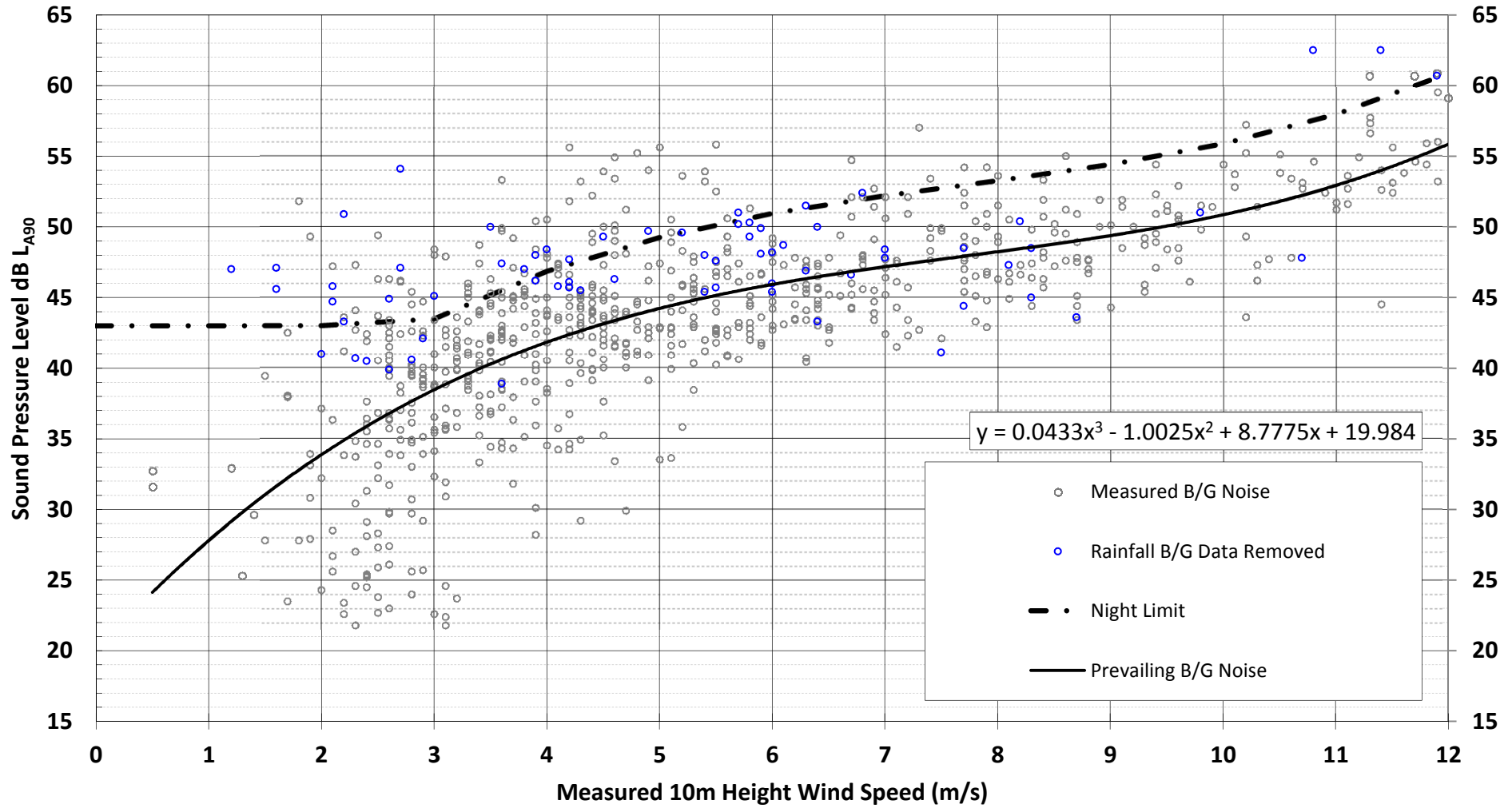
### Daytime Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO4 - Background Noise & Resultant Limits vs Wind Speed

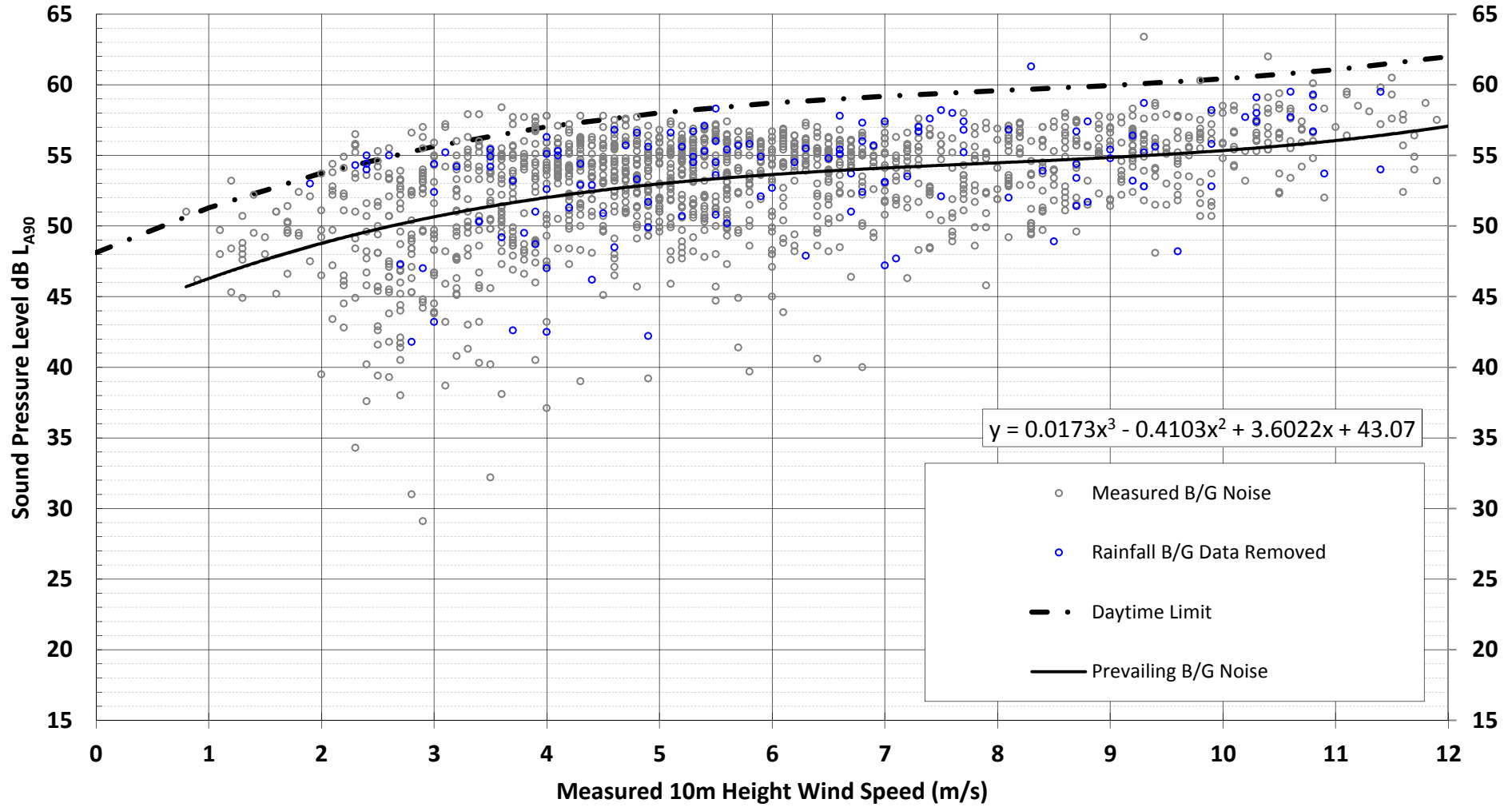
### Night-time Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO4 - Background Noise & Resultant Limits vs Wind Speed

### Daytime Hours

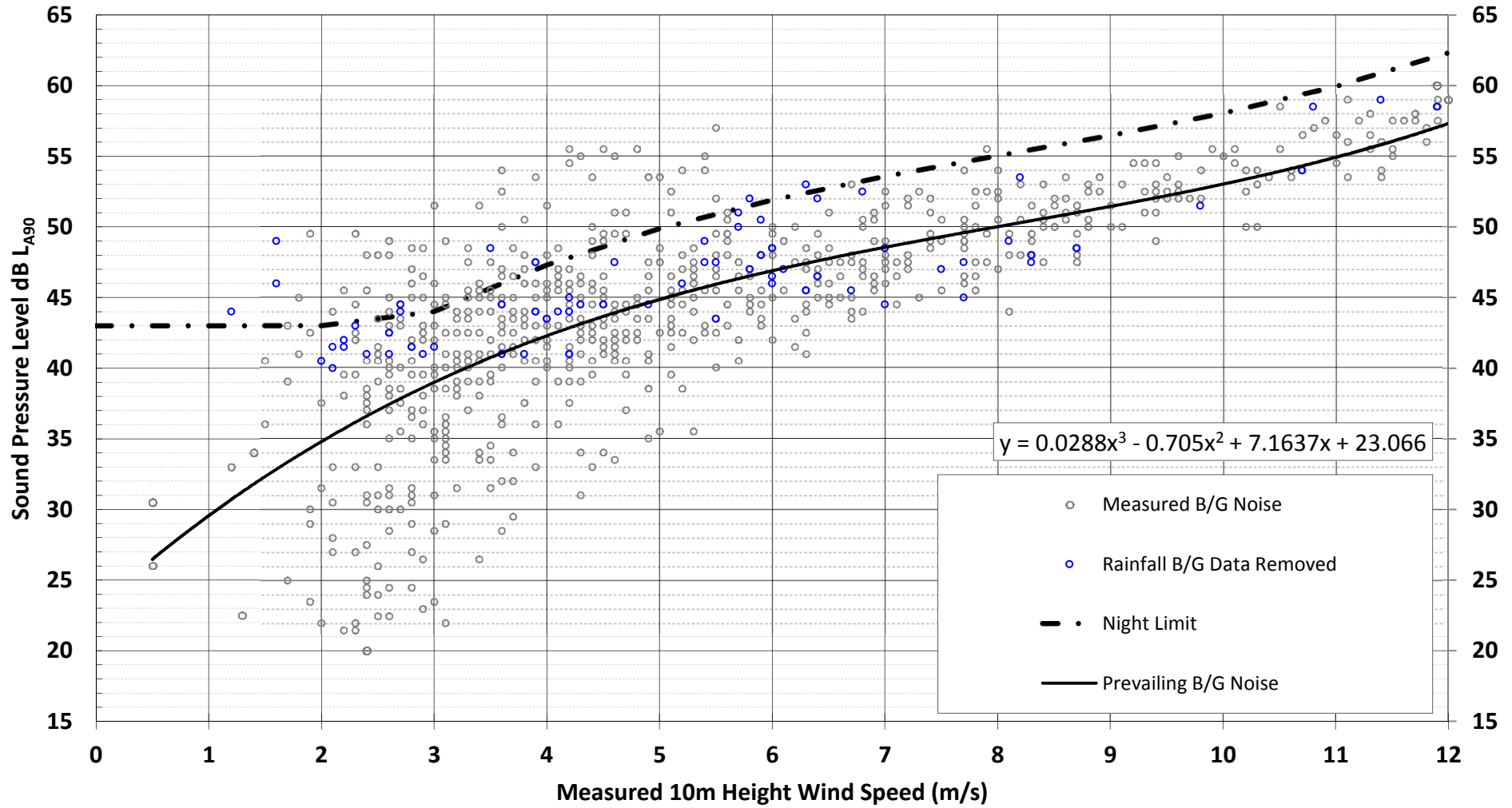




# Ballynakil 2 Wind Farm Noise Assessment

## LO5 - Background Noise & Resultant Limits vs Wind Speed

### Night-time Hours



# Ballynakill 2 Wind Farm Noise Assessment

## LO5 - Background Noise & Resultant Limits vs Wind Speed

### Daytime Hours

