



Netherlands Enterprise Agency

Metocean Campaign

Ten noorden van de Waddeneilanden Wind Farm Zone

*>> Sustainable. Agricultural. Innovative.
International.*





RVO Approval for Publication

Document Characteristics

Version	Title	Date of Approval for Publication	Reference Contractor	Reference RVO
	Supply of Meteorological and Oceanographic data at Ten noorden van de Waddeneilanden	January 2022	Fugro	WOZ2190157

Approval

Approval for public disclosure	Position
Huygen van Steen	Project Manager RVO Offshore Wind Energy
Matté Brijder	Programme Manager RVO Offshore Wind Energy

Supply of Meteorological and Oceanographic data at Ten noorden van de Waddeneilanden

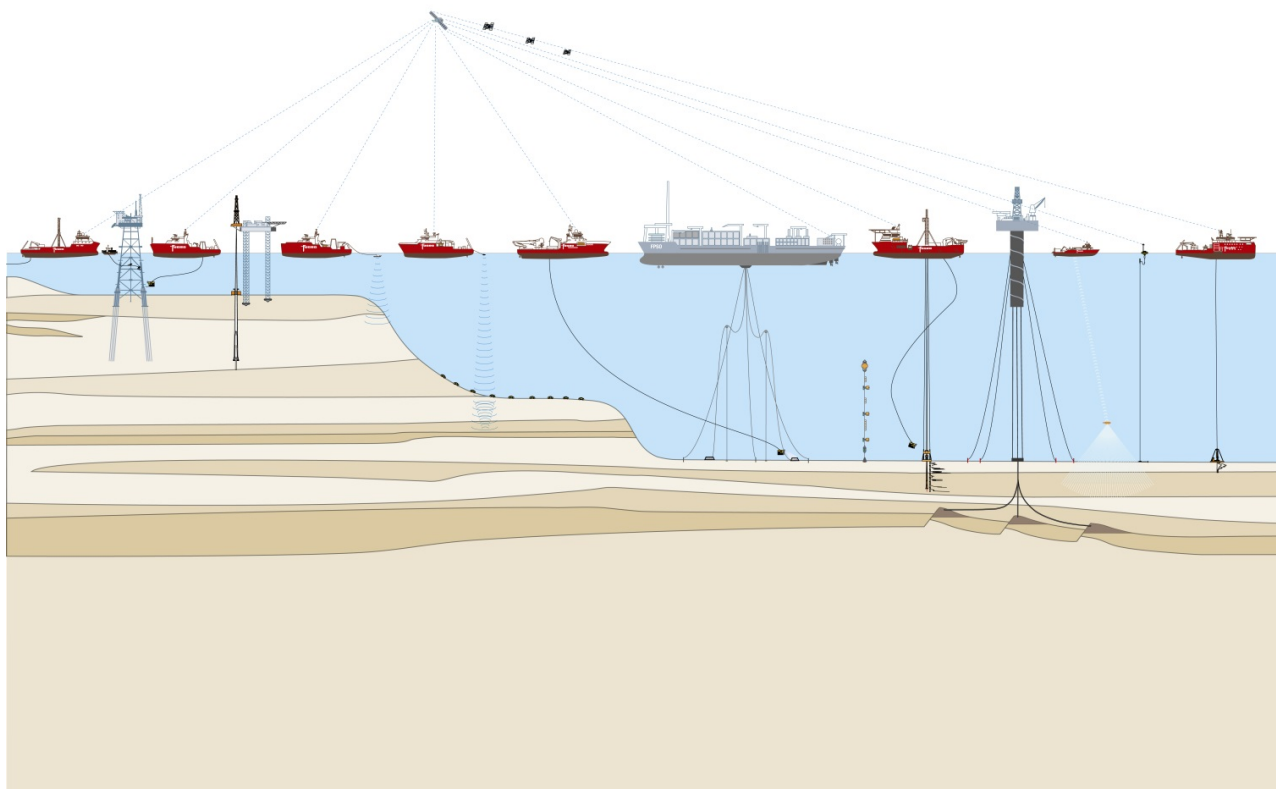
24-month summary campaign report:

19 June 2019 - 20 June 2021

Fugro Document No: C75433_24M_F

Date: 03 January 2022

THE NETHERLANDS ENTERPRISE AGENCY (RVO)



Supply of Meteorological and Oceanographic data at Ten noorden van de Waddeneilanden: C75433_24M_F					
Rev	Date	Originator	Checked	Approved	Issue Purpose
1	01.10.2021	Irene Pathirana	Arve Berg		Draft report for client review.
2	14.12.2021	Irene Pathirana	Arve Berg		Updated report for client review.
F	03.01.2022	Irene Pathirana	Arve Berg	Arve Berg	Final report.

Rev F– 03 January 2022	Originator	Checked	Approved
Signed:	<i>Irene Pathirana</i>	<i>Arve Berg</i>	<i>Arve Berg</i>

This report is not to be used for contractual or engineering purposes unless the above is signed where indicated by both the originator of the report and the checker/approver and the report is designated 'FINAL'.

EXECUTIVE SUMMARY

Fugro was contracted by RVO to supply meteorological and oceanographic measurement data at Ten noorden van de Waddeneilanden (TNW) Wind Farm Zone (WFZ) during a two-year campaign from 19th June 2019 - 20th June 2021. It is the aim of the measurement campaign to provide two sets of continuous meteorological and oceanographic (metocean) data including wind profiles at Ten noorden van de Waddeneilanden with excellent quality and high availability.

Two Seawatch Wind LiDAR Buoy (SWLB) were deployed at the TNW location on 19th June 2019 at stations TNWA and TNWB. An additional third station TNWA-2 was set up in January 2021 after the mooring at TNWA became unusable. In March 2021 an additional station TNWB-2 was added after the mooring at TNWB became unusable. The full campaign ended after two years in June 2021.

From mid-March 2020 service and maintenance operations were restricted by government measures to mitigate the Corona virus pandemic.

Throughout the campaign 7 SWLBs - WS190, WS191, WS170, WS156, WS199, WS187, WS181 - were used and rotated between the stations with the goal of having 2 stations active at all times. The two SWLBs provide a redundant arrangement of instrumentation for the measurement campaign in particular in order to safeguard against data loss. This resulted in 13 deployments (i.e. time buoy moored at sea and active) between June 2019 and June 2021.

The SWLB systems were deployed with accompanying bottom mounted tide gauges and temperature sensors with acoustic communication links to the buoys.

Data validation of the measurement campaign was performed by comparing the measurements between the two SWLBs and with nearby references. Deltares as an independent institute was subcontracted by Fugro to carry out the data validation by conducting an independent analysis of the performance of the measurement campaign.

This report summarises the activities and data from the full 24-month period and includes all final post-campaign quality checks and post-processing. The 24-month dataset supersedes all previously published data from this campaign.

In addition to the data files, data quality is summarized in data quality flag files provided for each datafile. Flags are given as integers (e. g. 0 = publication, 5 = failed, 9 = missing) for each parameter, for each timestep. Details are given in [Section 3.6](#). These files are intended to be used alongside the data files.

Based on this 24-month dataset, a validation report by Deltares covering the full 24-month campaign is provided as an accompanying report [1].

Metadata templates giving an overview over details of the deployments and datasets available are found in [Appendix D: Metadata](#).

DEFINITIONS AND ABBREVIATIONS

Convention of directions:

Directions are given in degrees (°) increasing clockwise from North. For wind and waves the direction is defined as incoming: 0° means wind/waves from the North, 90° from the East etc. For current velocity, the vector or flow direction is used: 0° means current flowing toward the North, 90° toward the East etc. The directions are subject to the source of heading, which is either relative to magnetic north if a magnetic compass is used (wind directions from Gill, LiDAR if compass is used, waves, currents) or relative to true north if DGPS is the main heading source (LiDAR wind directions if DGPS is used).

At TNW the deviation between magnetic and true north is $\leq 1^\circ$. This difference is negligible if directions determined with two different heading sources are compared.

Time: All times refer to UTC.

Abbreviations:

a.s.f.	above sea floor
DD	day of month 2 digits
DGPS	DualGPS system
LAT	Lowest Astronomical Tide
MM	month 2 digits
Month	Month as text
MSL	Mean Sea Level
NaN	Not-a-Number
SWLB	Seawatch Wind LiDAR Buoy
TI	Turbulence Intensity
UTC	Universal Time Coordinated
WLS	Water level sensor
X	A, B, A-2 or B-2 to separate TNWA, TNWB, TNWA-2 and TNWB-2 respectively
YYYY	year 4 digits

Definitions of wave parameters used in this report

Symbol	Unit	Description
H	m	Individual wave height
Hmax	m	$= \text{Max}(H)$: Height of the highest individual wave in the sample, measured from crest to trough in m
Hm0	m	Estimate of significant wave height, h_s , $hm0 = 4\sqrt{m0}$ in m
Tp	s	Period of spectral peak $= 1/f_p$. The frequency/period with the highest energy in s
Tz	s	Average period of individual waves (from zero upcrossing)
Thmax	s	Period of the highest wave, found in Hmax (from zero upcrossing)
Tm01	s	Estimate of the average wave period; $Tm01 = m0/m1$ in s
Tm02	s	Another estimate of the average wave period; $Tm02 = \sqrt{\frac{m0}{m2}}$
ThTp	°	Mean wave direction at the spectral peak in deg ("The direction of the most energetic waves")
Mdir	°	Wave direction averaged over the whole spectrum
Hm0a, Hm0b	m	Estimates of H_s for frequency bands "a" ([0.04 Hz, 0.1 Hz]) and "b" ([0.1 Hz, 0.5 Hz]), as Hm0, but with the moments calculated by integration over the respective frequency bands
Tm02a, Tm02b	s	Estimate of mean wave periods in s calculated for frequency bands "a" and "b"
Mdira, mdirb	°	Estimate of mean wave direction in deg calculated for frequency bands "a" and "b" Directions are given in degrees clockwise from north, giving the direction the waves come from (0° from north, 90° from east, etc.)
Sprtp	°	Wave spreading at the spectral peak frequency
Thhf	°	Mean wave direction in high frequency band (between 0.4 and 0.44 Hz)

TABLE OF CONTENTS

DEFINITIONS AND ABBREVIATIONS	iii
1 INTRODUCTION	1
1.1 Overview	1
1.2 QHSE	5
1.3 Data files	6
1.4 Pre-deployment validation	10
1.5 TNW 24M campaign data validation	11
2 Instrumentation and measurement configuration	12
2.1 Summary of instrumentation and measurement scheme	12
3 Data flow, post-processing and quality control	15
3.1 Data flow	15
3.2 Measurement principles	16
3.2.1 Heading sources	16
3.2.2 Waves	16
3.2.3 Wind	17
3.2.4 Current measurements	18
3.2.5 Air temperature and humidity	18
3.2.6 Air pressure	18
3.2.7 Water level	19
3.2.8 Water temperature	19
3.2.9 Buoy position (GPS)	19
3.3 Post-processing	20
3.3.1 General steps and filtering	20
3.3.2 Wind data post processing	23
3.3.3 Wave data post processing	24
3.3.4 Current data post processing	24
3.3.5 Water level	24
3.4 Post-processing version number	25
3.5 Quality control	26
3.6 Data Quality Flags	27
3.7 Calculations of data availability from the SWLB	29
4 Deployments	30
4.1 Deployment 1: TNWA - WS190	30
4.2 Deployment 2: TNWB - WS191	32
4.3 Deployment 3: TNWA - WS170	34
4.4 Deployment 4: TNWB - WS191	36
4.5 Deployment 5: TNWA - WS190	38
4.6 Deployment 6: TNWB - WS170	40
4.7 Deployment 7: TNWA - WS191	42
4.8 Deployment 8: TNWB - WS190	44
4.9 Deployment 9: TNWB - WS156	46
4.10 Deployment 10: TNWA-2 - WS199	48

4.11 Deployment 11: TNWB - WS187	50
4.12 Deployment 12: TNWB-2 - WS187	52
4.13 Deployment 13: TNWB-2 - WS181	54
5 Campaign Summary	56
References	68
Appendix A: Buoy instrumentation overview	A.69
A.1 WS190	A.69
A.2 WS191	A.70
A.3 WS170	A.71
A.4 WS156	A.72
A.5 WS199	A.73
A.6 WS187	A.74
A.7 WS181	A.75
Appendix B: File Contents	B.76
B.1 File contents	B.76
B.2 Signal Tables	B.80
Appendix C: List of Files	B.85
Appendix D: Metadata	B.86
Appendix E: Data gap tables	E.87
E.1 Deployment 1	E.87
E.2 Deployment 2	E.124
E.3 Deployment 3	E.164
E.4 Deployment 4	E.174
E.5 Deployment 5	E.182
E.6 Deployment 6	E.191
E.7 Deployment 7	E.193
E.8 Deployment 8	E.204
E.9 Deployment 9	E.205
E.10 Deployment 10	E.210
E.11 Deployment 11	E.227
E.12 Deployment 12	E.229
E.13 Deployment 13	E.232

List of Figures

1.1	Map of the Dutch offshore wind farm zones in the North Sea including the TNW Wind Farm Zone.	1
1.2	Map showing the buoy locations.	3
2.1	Illustration of the wind and current profile measurements from the LiDAR buoy. Heights ref. sea surface	12
2.2	Mooring design for the SWLB at Ten noorden van de Waddeneilanden, Station TNWA	13
5.1	Station occupancy during TNW campaign.	56

List of Tables

1.1	Positions (ETRS89/UTM zone 31N) of the LiDAR buoys at TNW	2
1.2	Overview over Deployments (Depl.) at TNW	4
1.3	Data files that make up the TNW set of data presented in this report.	6
1.3	Data files that make up the TNW set of data presented in this report.	7
1.4	Raw data files that form the basis of the TNW set of data presented in this report, where Dep = deployment, buoy = buoy number, X = station, Y = year, M = month, D = day, ?? for start and end times and LiDAR unit number.....	8
1.4	Raw data files that form the basis of the TNW set of data presented in this report, where Dep = deployment, buoy = buoy number, X = station, Y = year, M = month, D = day, ?? for start and end times and LiDAR unit number.....	9
2.1	Configuration of measurements by the Seawatch Wind LiDAR buoys at TNW.....	14
3.1	QA/QC filter flags indicating which filter was applied (and data points replaced by NaN) for each parameter (with reference to the processing given in the list above).....	21
3.2	QA/QC filter ranges for each parameter	22
3.3	LAT conversion parameter used in each deployment.....	25
3.4	Quality flags.....	28
4.1	Details on Deployment 1	30
4.2	Post-processed system availability as per Section 3.7 in % during TNW Deployment 1.	31
4.3	Wind speed statistics during TNW Deployment 1: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	31
4.4	Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 1.....	31
4.5	Details on Deployment 2	32
4.6	Post-processed system availability as per Section 3.7 in % during TNW Deployment 2.	32
4.7	Wind speed statistics during TNW Deployment 2: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	33
4.8	Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 2.....	33
4.9	Details on Deployment 3	34
4.10	Post-processed system availability as per Section 3.7 in % during TNW Deployment 3.	34
4.11	Wind speed statistics during TNW Deployment 3: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	35
4.12	Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 3.....	35
4.13	Details on Deployment 4	36
4.14	Post-processed system availability as per Section 3.7 in % during TNW Deployment 4.	36
4.15	Wind speed statistics during TNW Deployment 4: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	37

4.16 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 4.....	37
4.17 Details on Deployment 5	38
4.18 Post-processed system availability as per Section 3.7 in % during TNW Deployment 5.....	38
4.19 Wind speed statistics during TNW Deployment 5: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	39
4.20 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 5.....	39
4.21 Details on Deployment 6	40
4.22 Post-processed system availability as per Section 3.7 in % during TNW Deployment 6.....	40
4.23 Wind speed statistics during TNW Deployment 6: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	41
4.24 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 6.....	41
4.25 Details on Deployment 7	42
4.26 Post-processed system availability as per Section 3.7 in % during TNW Deployment 7.....	42
4.27 Wind speed statistics during TNW Deployment 7: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	43
4.28 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 7.....	43
4.29 Details on Deployment 8	44
4.30 Post-processed system availability as per Section 3.7 in % during TNW Deployment 8.....	44
4.31 Wind speed statistics during TNW Deployment 8: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	45
4.32 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 8.....	45
4.33 Details on Deployment 9	46
4.34 Post-processed system availability as per Section 3.7 in % during TNW Deployment 9.....	46
4.35 Wind speed statistics during TNW Deployment 9: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	47
4.36 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 9.....	47
4.37 Details on Deployment 10.....	48
4.38 Post-processed system availability as per Section 3.7 in % during TNW Deployment 10.....	48
4.39 Wind speed statistics during TNW Deployment 10: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	49
4.40 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 10.....	49
4.41 Details on Deployment 11.....	50
4.42 Post-processed system availability as per Section 3.7 in % during TNW Deployment 11.....	50
4.43 Wind speed statistics during TNW Deployment 11: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)	51

4.44 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 11.....	51
4.45 Details on Deployment 12.....	52
4.46 Post-processed system availability as per Section 3.7 in % during TNW Deployment 12.	52
4.47 Wind speed statistics during TNW Deployment 12: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.).....	53
4.48 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 12.....	53
4.49 Details on Deployment 13.....	54
4.50 Post-processed system availability as per Section 3.7 in % during TNW Deployment 13.	54
4.51 Wind speed statistics during TNW Deployment 13: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.).....	55
4.52 Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 13.....	55
5.1 Large storm events during the TNW campaign.....	58
5.2 Post-processed system availability in % during 24-month TNW campaign.	59
5.3 Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.	60
5.3 Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.	61
5.3 Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.	62
5.3 Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.	63
5.3 Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.	64
5.4 Signal availability for wind in % for all deployments at TNW.....	64
5.5 Signal availability in % for metocean parameters for all deployments at TNW.....	64
5.5 Signal availability in % for metocean parameters for all deployments at TNW.....	65
5.6 Signal availability in % for currents for all deployments at TNW.....	65
5.6 Signal availability in % for currents for all deployments at TNW.....	66
5.6 Signal availability in % for currents for all deployments at TNW.....	67
A.1 Instrumentation overview WS190.....	A.69
A.2 Instrumentation overview WS191.....	A.70
A.3 Instrumentation overview WS170.....	A.71
A.4 Instrumentation overview WS156.....	A.72
A.5 Instrumentation overview WS199.....	A.73
A.6 Instrumentation overview WS187.....	A.74
A.7 Instrumentation overview WS181.....	A.75
B.1 <i>CurrentDataStat</i> signals.....	B.80
B.2 <i>MetDataStat</i> signals.....	B.81
B.3 <i>WaveDataStat</i> signals.....	B.82
B.4 <i>WindResourceSpeedDirectionTISat</i> signals.....	B.83
B.5 <i>WindResourceInflowAnglesStat</i> signals.....	B.84

1. INTRODUCTION

1.1 Overview

Fugro was contracted by RVO to supply meteorological and oceanographic measurement data at the Ten noorden van de Waddeneilanden (TNW) Wind Farm Zone (WFZ) in the Dutch sector of the southern North Sea. The goal of the measurement campaign is to provide a 24-month continuous wind profile and metocean data set. It is expected that the data will allow stakeholders to carry out more accurate calculations of the annual energy yield and improve/validate metocean models that have been made as input for the overall wind farm design. Furthermore, it is expected that the resulting accurate wind and metocean data will lead to a lower uncertainty and therefore lower cost of capital in the business case for an offshore wind farm.

The extent of the TNW Wind Farm Zone is shown in [Figure 1.1](#).

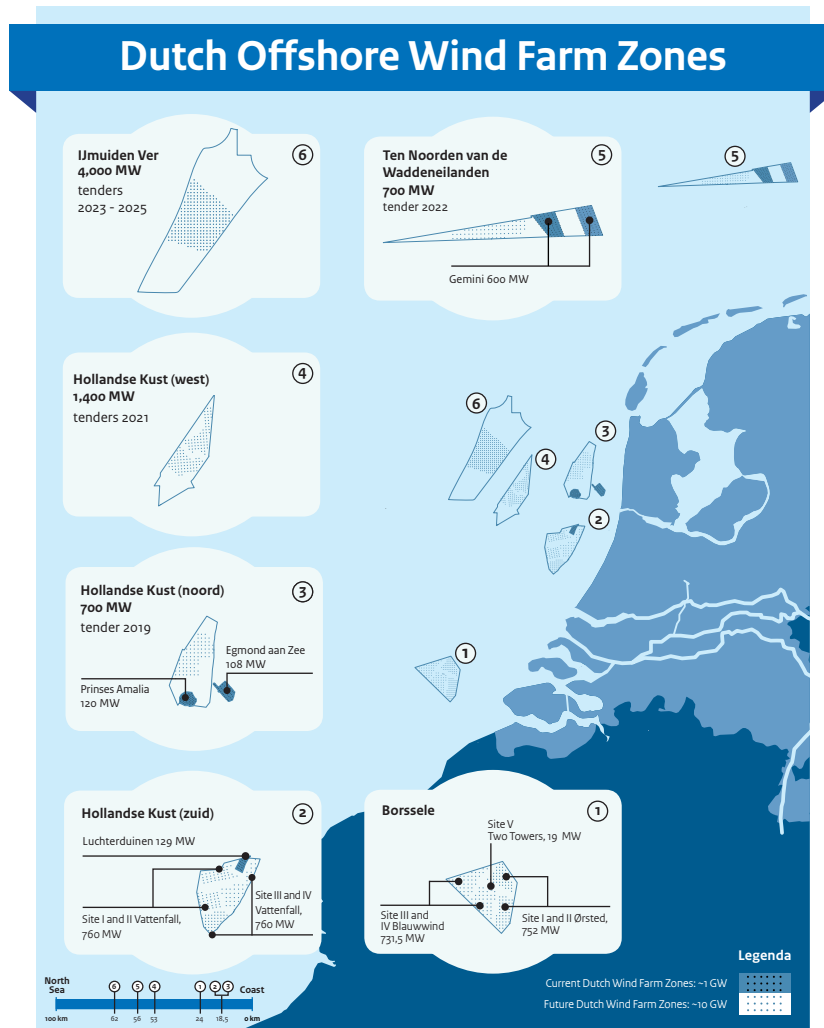


Figure 1.1: Map of the Dutch offshore wind farm zones in the North Sea including the TNW Wind Farm Zone.

Two independent Seawatch Wind LiDAR buoys with serial nos. WS190 and WS191 with accompanying water level sensors (WLS) were deployed at the Ten noorden van de Waddeneilanden locations TNWA and TNWB, respectively, in the Dutch North Sea.

The positions of the bottom mooring weights are listed in [Table 1.1](#) and [Figure 1.2](#) shows the positions of the buoys throughout the campaign. The water depths relative to LAT for this region are based on data from a detailed bathymetric survey by Fugro commissioned by RVO. As the buoys are free to float around the mooring point within a radius of about 110 m, the actual water depth at the actual position of the buoy varies. The position of the WLS is assumed equal to the position of the bottom weight of the associated buoy.

In April 2020 the mooring for the TNWA station was moved ca. 200 m to the east to ease COVID-19 restricted vessel crew only operations for switching buoys. The designation TNWA was kept. D05 and D07 were deployed on this 2nd TNWA mooring.

The TNWA station became unusable after 30th December 2020 due to parts of the mooring left on the seafloor after WS191 drifted. Therefore, a new station TNWA-2 ca. 500 m east of of TNWA was introduced. The distance was chosen to have a clear separation between the 2 mooring locations at TNWA and the new TNWA-2 station.

The TNWB station became unusable after 15th February 2020 when the floater for the mooring disappeared after WS187 drifted. Therefore, a new station TNWB-2 130 m east of of TNWB was introduced.

Table 1.1: Positions (ETRS89/UTM zone 31N) of the LiDAR buoys at TNW

Station	Longitude (E)	Latitude (N)	Easting (m)	Northing (m)	Water depth (m MSL)
TNWA	5° 33.014'	54° 01.089'	667077	5988551	~ 36
TNWA-2	5° 33.8302'	54° 01.0932'	667968	5988591	~ 38
TNWB	5° 32.988'	54° 01.306'	667034	5988952	~ 36
TNWB-2	5° 33.1098'	54° 01.3044'	667167	5988954	~ 37

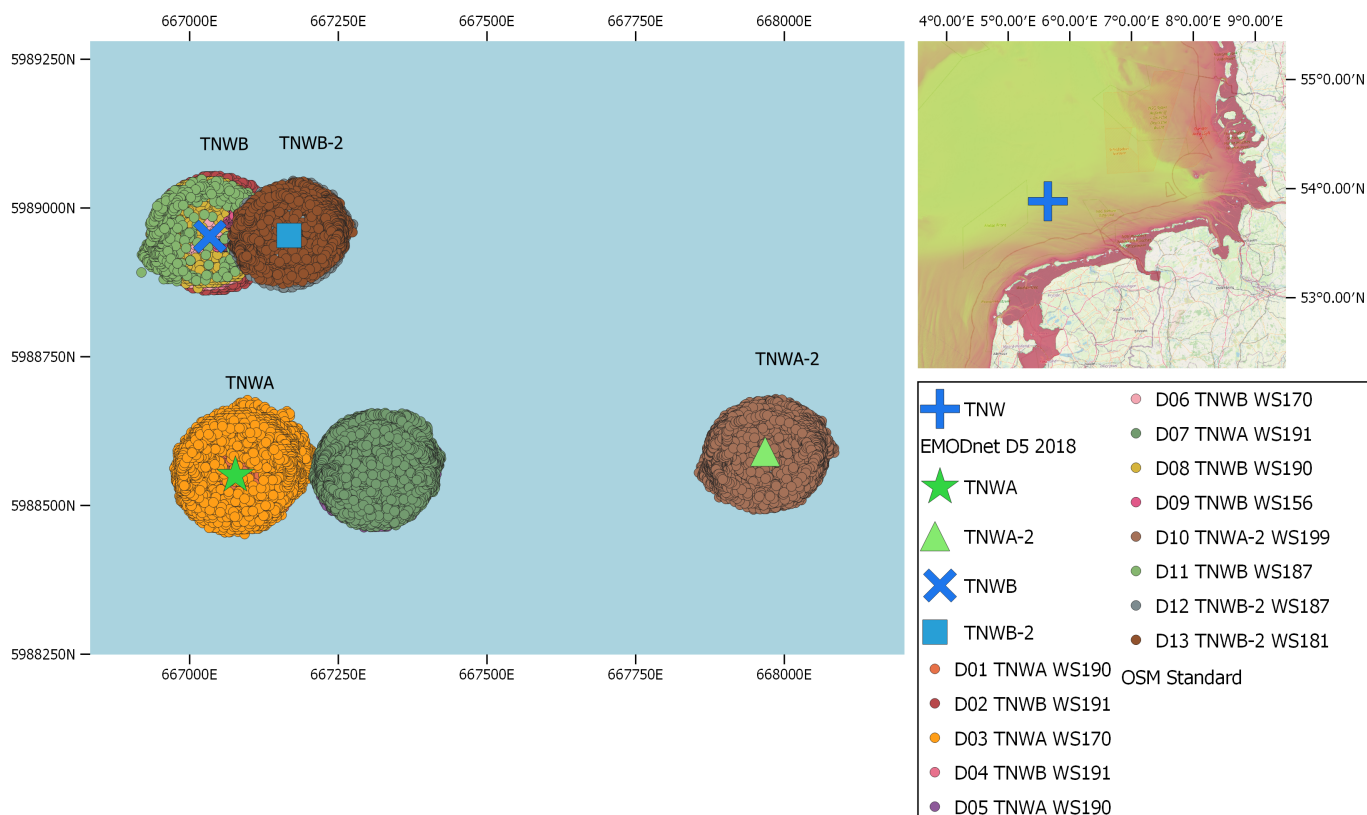


Figure 1.2: Map showing the buoy locations. Note the 2 alternate locations for TNWA.

Throughout the campaign 7 SWLBs - WS190, WS191, WS170, WS156, WS199, WS187, WS181 - were used and rotated between the stations with the goal of having 2 stations active at all times. The two SWLBs provide a redundant arrangement of instrumentation for the measurement campaign in particular in order to safeguard against data loss. This resulted in 13 deployments (i.e. time buoy moored at sea and active) between June 2019 and June 2021. An overview over the deployments is given in [Table 1.2](#) while [chapter 4](#) gives detailed information about each deployment.

Instrumentation for each buoy and any changes are summarized in [Appendix 5](#). SWLB WS170 was a shared spare buoy between this TNW project and the Hollandse Kust (west) (HKW) project (also with RVO). WS187 was one of the main buoys at HKW which was then transferred to TNW after the HKW campaign ended. Further details can be found in the monthly reports of the HKW campaign (<https://offshorewind.rvo.nl/windwaterw>). WS199 and WS181 were new buoys introduced to TNW to replace WS190 and WS191. WS156 was an upgraded single-hull spare buoy without DGPS.

Table 1.2: Overview over Deployments (Depl.) at TNW

Dep. Number	Station	Buoy	LiDAR unit	Start Time (UTC)	End Time (UTC)	Chapter
01	TNWA	WS190	ZX843M	2019-06-19 04:50	2020-01-22 08:30	Section 4.1
02	TNWB	WS191	ZX862M	2019-06-19 06:00	2020-01-22 10:10	Section 4.2
03	TNWA	WS170	ZX585M	2020-01-22 09:30	2020-04-11 06:50	Section 4.3
04	TNWB	WS191	ZX862M	2020-04-11 06:10	2020-06-24 06:50	Section 4.4
05	TNWA	WS190	ZX843M	2020-04-11 07:00	2020-07-22 17:00	Section 4.5
06	TNWB	WS170	ZX585M	2020-06-24 06:50	2020-09-14 18:00	Section 4.6
07	TNWA	WS191	ZX862M	2020-07-22 18:30	2020-12-30 11:30	Section 4.7
08	TNWB	WS190	ZX843M	2020-09-14 22:00	2020-10-25 11:20	Section 4.8
09	TNWB	WS156	ZX501M	2020-11-10 07:40	2021-01-25 09:10	Section 4.9
10	TNWA-2	WS199	ZX898M	2021-01-16 08:40	2021-06-20 23:50	Section 4.10
11	TNWB	WS187	ZX818M	2021-01-25 10:20	2021-02-15 19:00	Section 4.11
12	TNWB-2	WS187	ZX818M	2021-03-03 08:10	2021-05-03 04:20	Section 4.12
13	TNWB-2	WS181	ZX759M	2021-05-03 06:10	2021-06-20 23:50	Section 4.13

Data measured at each buoy is packed into a digital package that is simultaneously stored on the buoy and transmitted via satellite to allow for near real-time operations checks, maintenance scheduling and monthly reporting. Data stored onboard are downloaded at regular intervals and form the basis of this report.

1.2 QHSE

From mid-March 2020 operations were restricted by government measures to mitigate the Corona pandemic. Offshore operations are done by vessel crew only without any Fugro engineers onboard.

The following incidents arose during the campaign:

- During deployment 03, SWLB WS170 was hit and tilted likely also partially submerged by an extremely large wave during a large storm (*Ciara*). The data indicates that hm_0 and h_{max} peaked outside valid range, air temperature and humidity disappeared and 3 of 4 fuel cells malfunctioned. In addition WS170 suffered damage to the main mast resulting in an offset in the DGPS heading data. The LiDAR unit was unaffected. Wind direction for TNW deployments 3 and 6 was reprocessed with compass heading.
- During deployment 08, SWLB WS190 moored at TNWB began to drift during a storm at 11:20 UTC on 25th of October 2020, and was recovered with heavy damage during an emergency operation 12 hours later. WS190 was retired from the project.
- During deployment 07, SWLB WS191 moored at TNWA began to drift during a storm at 11:30 UTC on 30th of December 2020, and was recovered with heavy damage during an emergency operation 31st December 2020. As far as can be ascertained, the WS191 buoy did not sustain damages in the lead up or during the drifting incident but during the rescue operation and the data is considered valid until the start of the drift at 2020-12-30 11:30 UTC. WS191 was retired from the project. The TNWA station became unusable for the remainder of the campaign due to parts of the mooring left on the seafloor.
- During deployment 11, SWLB WS187 moored at TNWB started drifting around 19:00 UTC on 15th of February 2021 after likely contact with a vessel and was recovered on 16th of February 2021. Damage was mostly confined to the instruments on the mast top carriers. WS187 was repaired and deployed again. The TNWB station became unusable for the remainder of the campaign after the floater for the TNWB mooring was not found.

There were no other HSE related incidents during the deployments or any other activity related to this project.

1.3 Data files

Table 1.3 below provides a list of the processed data provided related to this report collected by Fugro as part of the survey campaign. Table 1.4 lists the raw data files associated with this dataset. Details about the contents of each data file are given in Appendix B: File Contents. A complete list of files is given in Appendix C: List of Files. Recurring identifiers for the raw data files are possible but can be resolved using timestamps.

Table 1.3: Data files that make up the TNW set of data presented in this report.

Dep. No.	FileID <id>	File suffix <FILESUFF>
01	<id> TNW_20210909_Fugro_MetOcean Buoys TNWA D01 2019-2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D01 2019-2020	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA D01 2019-2020	_F
02	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB D02 2019-2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D02 2019-2020	_F
	met & wave data <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D02 2019-2020	_F
	current data & flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D02 2019-2020	_F
03	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D02 2019-2020	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWA D03 2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D03 2020	_F
04	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA D03 2020	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB D04 2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D04 2020	_F
	met & wave data <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D04 2020	_F
05	current data & flags <id> TNW_20211119_Fugro_MetOcean Buoys TNWB D04 2020	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D04 2020	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWA D05 2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D05 2020	_F
06	met data <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D05 2020	_F
	current data & flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA D05 2020	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA D05 2020	_F
	<id> TNW_20211112_Fugro_MetOcean Buoys TNWB D06 2020	_F
07	met & wave flags <id> TNW_20211207_Fugro_MetOcean Buoys TNWB D06 2020	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWA D07 2020	_F
08	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D07 2020	_F
	met data <id> TNW_20211112_Fugro_MetOcean Buoys TNWA D07 2020	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA D07 2020	_F
09	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB D08 2020	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D08 2020	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D08 2020	_F
10	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB D09 2020-2021	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D09 2020-2021	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D09 2020-2021	_F
10	<id> TNW_20210909_Fugro_MetOcean Buoys TNWA-2 D10 2021	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWA-2 D10 2021	_F

Table 1.3: Data files that make up the TNW set of data presented in this report.

Dep. No.	FileID <id>	File suffix <FILESUFF>
11	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWA-2 D10 2021	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB D11 2021	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D11 2021	_F
12	met & wave data <id> TNW_20211112_Fugro_MetOcean Buoys TNWB D11 2021	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB D11 2021	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB-2 D12 2021	_F
13	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB-2 D12 2021	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB-2 D12 2021	_F
	<id> TNW_20210909_Fugro_MetOcean Buoys TNWB-2 D13 2021	_F
	filter & quality flags <id> TNW_20211112_Fugro_MetOcean Buoys TNWB-2 D13 2021	_F
	met & wave flags <id> TNW_20211213_Fugro_MetOcean Buoys TNWB-2 D13 2021	_F
Item	File	
Current Data	<id> CurrentDataStat<FILESUFF>.csv	
Current Data Flags	<id> CurrentDataStatFlags<FILESUFF>.csv	
Current Data Quality Flags	<id> CurrentDataStatQualityFlags<FILESUFF>.csv	
Met Data	<id> MetDataStat<FILESUFF>.csv	
Met Data Flags	<id> MetDataStatFlags<FILESUFF>.csv	
Met Data Quality Flags	<id> MetDataStatQualityFlags<FILESUFF>.csv	
Position Data	<id> PosData<_FILESUFF>.csv	
Status Data	<id> StatusData<_FILESUFF>.csv	
Supplementary Data	<id> SupplementaryData<FILESUFF>.csv	
Wave Data	<id> WaveDataStat<_FILESUFF>.csv	
Wave Data Flags	<id> WaveDataStatFlags<FILESUFF>.csv	
Wave Data Quality Flags	<id> WaveDataStatQualityFlags<FILESUFF>.csv	
Wind Data	<id> WindResourceSpeedDirectionStat<FILESUFF>.csv	
Wind Data Filter Flags	<id> WindResourceFilterFlags<FILESUFF>.csv	
TI Veer Shear	<id> WindResourceTIVeerShearInflow<FILESUFF>.csv	
Wind Data Status Flags	<id> WindResourceStatusFlags<FILESUFF>.csv	
Wind Data Quality Flags	<id> WindResourceStatQualityFlags<FILESUFF>.csv	

Table 1.4: Raw data files that form the basis of the TNW set of data presented in this report, where Dep = deployment, buoy = buoy number, X = station, Y = year, M = month, D = day, ?? for start and end times and LiDAR unit number.

Dep. No.	Dataset	File
01	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
02	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
03	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
04	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
05	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
06	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
07	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
08	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin

Table 1.4: Raw data files that form the basis of the TNW set of data presented in this report, where Dep = deployment, buoy = buoy number, X = station, Y = year, M = month, D = day, ?? for start and end times and LiDAR unit number.

Dep. No.	Dataset	File
09	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
10	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
11	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
12	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin
13	LiDAR Wind	Wind_unit@Y_M_D.ZPH
	Currents	aquadopp-Y-M-D.txt
	Raw waves	TNW_Dep_X_buoy_chpr.csv
	Wave spectra	memspec_X_Dep_buoy_Y-M-D-D.txt
	Water level	thelma-T-M-D.bin

1.4 Pre-deployment validation

The Fugro Seawatch Wind LiDAR buoy is 3rd party type validated by the accredited institution DNVGL to be in the pre-commercial stage according to Carbon Trust's requirements [2] over a six-month trial [3]. That trial took place in 2014 at the now decommissioned RWE met mast in the Dutch North Sea with overall post-processed data availability of > 97 %. The Best Practice criteria for the KPIs for "Mean Wind Speed – Slope and Coefficient of Determination", "Mean Wind Direction – Slope, Coefficient of Determination and Offset" were passed indicating the capability of capturing wind directions at high accuracy. A similar six-month trial was conducted at the East Anglia One met mast in 2015 as part of the Carbon Trust programme, with the performance independently verified by Natural Power [4]. All wind speed KPI's exceeded the best practise limits, as well as most wind direction KPI's (minimum practice for wind direction offset at the top two measurement heights).

In addition, the specific systems WS190 and WS191 used in the TNW campaign were validated in a pre-deployment validation campaign according to [3] before the start of the TNW field measurement campaign. The performance of the systems was independently verified by DNV GL to reproduce accurate wind speed and direction across a range of wind and sea states against a land reference. The pre-deployment validation campaign took place at the Fugro validation site at the island of Frøya, Norway, [5] and [6]. The validation site has also been 3rd party evaluated by DNVGL [7] as suitable for the purpose of validating systems like the SWLB. Wind directions from both SWLB WS190 and SWLB WS191 were pre-deployment validated using DGPS (true north) as heading reference. For WS190 for all wind speed KPIs, the Best Practice criterion was passed for all wind speed ranges and at heights 100 m - 250 m. Minimum practice was passed for 40 m - 80 m. For all wind direction KPIs, the Best Practice criterion was passed at all heights. For WS191 for all wind speed KPIs, the Best Practice criterion was passed for all wind speed ranges and at heights 80 m - 250 m. Minimum practice was passed for 40 m and 60 m. For all wind direction KPIs, the Best Practice criterion was passed at all heights.

The 3rd SWLB WS170 (DGPS heading) was in situ validated using DGPS as heading source at the Hollandse Kust (west) Wind Farm Zone (HKWWFZ) metocean campagin site HKWC from 16th June 2019 - 11th August 2019 against WS187 (compass heading) at HKWA and WS188 (DGPS heading) at HKWB. For all wind direction KPIs, the Best Practice criterion was passed at all heights. For all wind speed comparisons the Best Practice criteria for the KPI "Mean Wind Speed – Slope" were passed at all heights. Comparing WS170 vs. WS188, the best practice acceptance criterion for the KPI "Mean Wind Speed – Coefficient of Determination" was passed at all heights and wind speed ranges [8]. After the 24-month HKW campaign ended, WS170 was post-deployment validated with compass heading against a fixed Windcube LiDAR at the LEG platform in the Dutch North Sea. For all wind direction KPIs, the Best Practice criterion was passed at all heights. For all wind speed KPIs, the Best Practice criterion was passed for all wind speed ranges and at all heights up to 200 m [9].

WS156 was an upgraded single-hull spare buoy without DGPS that had been previously used in the HKN and HKZ projects (<https://offshorewind.rvo.nl/windwaternh>, <https://offshorewind.rvo.nl/windwaterzh>) in the Dutch North Sea. It was agreed with RVO that this buoy should be regarded as "spare for spare" for the HKW and TNW projects. The LiDAR unit was re-validated at Zephir in August 2019. The monthly validations of November 2020, December 2020 and January 2021 serve as in situ validations and data quality assurance.

SWLB WS199 was validated in a pre-deployment validation campaign according to [3] in November and December 2019 at the Fugro validation site at the island of Frøya, Norway. Wind directions from SWLB WS199 were pre-deployment validated using DGPS as heading reference [10]. For all wind speed KPIs, the Best Practice criterion was passed for all wind speed ranges and at all heights up to 180 m. For 200 m minimum practice was reached. For all wind direction KPIs, the Best Practice criterion was passed at all

heights.

SWLB WS187 was validated in a pre-deployment validation campaign according to [3] before the start of the HKW field measurement campaign at the Fugro validation site at the island of Frøya, Norway. Wind directions from SWLB WS187 were pre-deployment validated using compass as heading reference [11]. For all wind speed comparisons the Best Practice criteria for the KPI “Mean Wind Speed – Slope” were passed at all heights. For all wind direction KPIs, the Best Practice criterion was passed at all heights. WS187 was used with DGPS heading for most of the HKW campaign.

SWLB WS181 was validated in a pre-deployment validation campaign according to [3] in January and February 2021 at the Fugro validation site at the island of Frøya, Norway. Wind directions from SWLB WS181 were pre-deployment validated using DGPS as heading reference [12]. For all wind speed KPIs, the Best Practice criterion was passed for all wind speed ranges and at all heights. For all wind direction KPIs, the Best Practice criterion was passed at all heights.

All other sensors used are *commercial* and have their tests performed according to each manufacturer’s procedure.

1.5 TNW 24M campaign data validation

Deltares as an independent institute was subcontracted by Fugro to conduct an independent field validation of the measurement campaign by comparing the measurements between the SWLBs and with nearby references. The Deltares validation report [1] is provided as an accompanying report.

The validation is carried out by quantifying the agreement between the TNW data and data from other reliable sources (anemometer, LiDAR, numerical models, etc) from fixed North Sea reference stations at the buoy locations. For current and wind measurements their respective vertical profiles are also assessed. All comparisons are presented as timeseries and further validated via direct scatter plots for quantifying statistical correspondence between the datasets.

A detailed description of the validation method and data sources used can be found in [1].

2. Instrumentation and measurement configuration

2.1 Summary of instrumentation and measurement scheme

Each buoy is a Seawatch Wind LiDAR Buoy based on the original Seawatch Wavescan buoy design with the following sensors and main equipment:

- Wavesense 3 3-directional wave sensor
- ZephIR ZX300 CW LiDAR
- Gill Windsonic M acoustic wind sensor
- Nortek Aquadopp 600kHz current profiler
- Vaisala PTB330A air pressure sensor
- Vaisala HMP155 air temperature and humidity sensor
- DualGPS Septentrio position tracking
- Acoustic receiver for Thelma TBR700 water pressure sensor

The LiDARs used in this project are maritized versions of the ZX300 LiDAR type.

An independent Thelma (TBR 700) water pressure (level) sensor (WLS) is located on the sea floor connected to the buoy mooring via a line. The pressure sensor transmits data to the buoy via an acoustic link.

The LiDAR is equipped with a met station that also measures air temperature and pressure. These measurements are given in the dataset as supporting data only (calibration not verified).

Figure 2.1 shows the basic shape of the buoy illustrating the principle for wind and current profile measurements. The drawing shows the location of the sensors, and illustrates the LiDAR and current profiler beams.

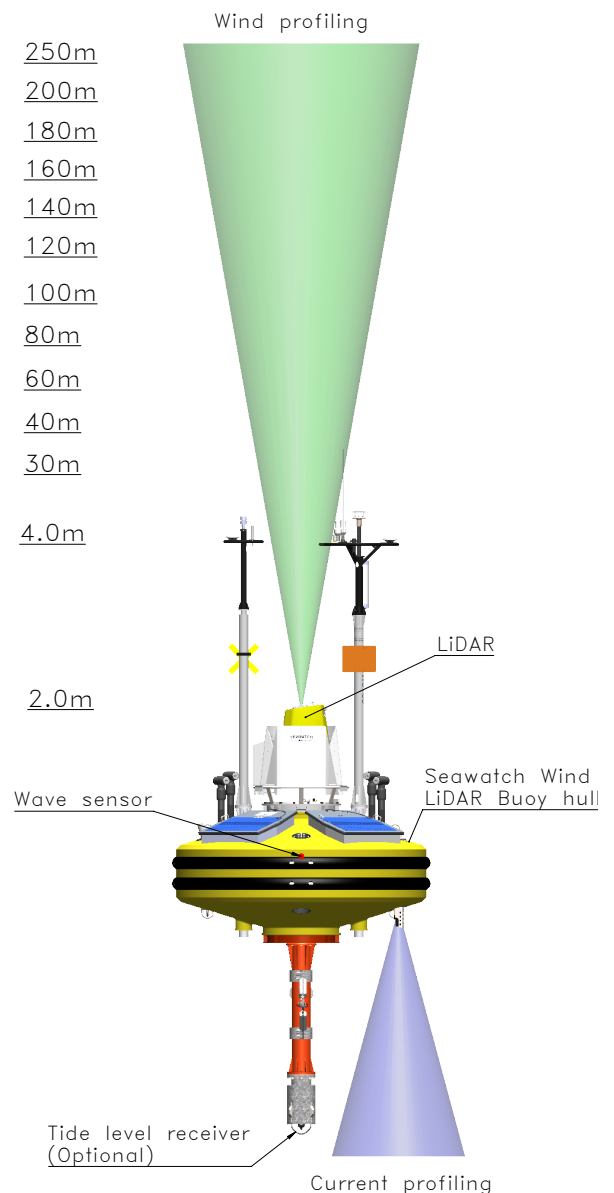


Figure 2.1: Illustration of the wind and current profile measurements from the LiDAR buoy. Heights ref. sea surface

The buoys are deployed with moorings as shown in Figure 2.2 which includes the mooring for the WLSs. All moorings for all TNW stations (TNWA, TNWA-2, TNWB, TNWB-2) are the exactly same as the one shown in Figure 2.2.

Each mast and instrument is mounted such that all instruments are aligned to produce the correct compass bearing. The measurement setup is detailed in Table 2.1.

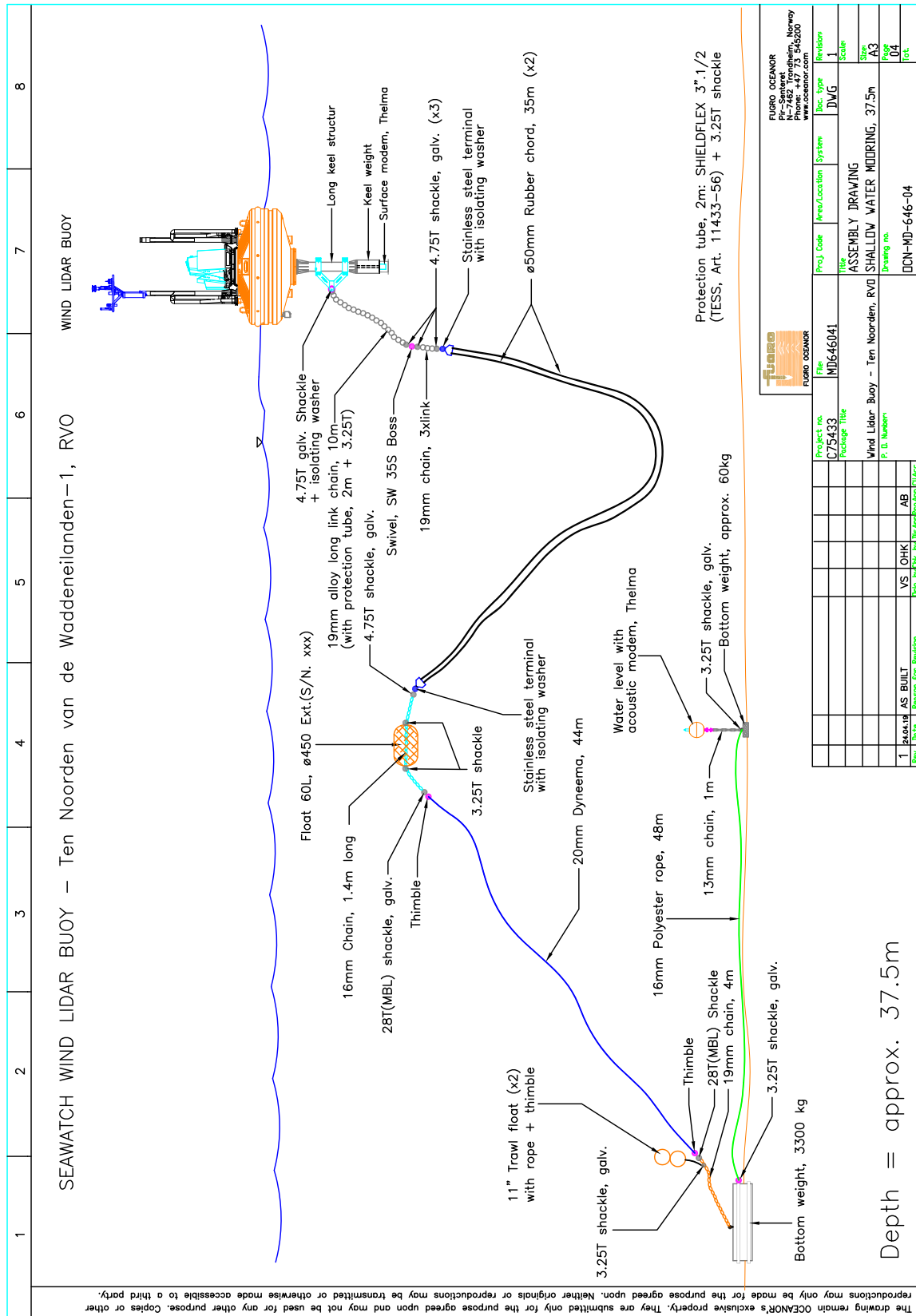


Figure 2.2: Mooring design for the SWLB at Ten noorden van de Waddeneilanden, Station TNWA

Table 2.1: Configuration of measurements by the Seawatch Wind LiDAR buoys at TNW

Instrument type	Sensor height ¹ (m)	Parameter measured	Sample height ¹ (m)	Sampling interval (s)	Averaging period (s)	Burst interval ² (s)	Sensor resolution	Transmitted?								
Wavesense 3	0	Heave, pitch, roll, heading	0	1	Time series duration: 1024 s	600	0.1m 0.2° 0.2° 0.5°	No								
		Sea state parameters (See Table B.3)	0	600	1024	600		Yes								
ZephIR ZX300 LiDAR	2	Wind speed and direction at 10 heights (The 11 th level, the so-called reference level which is not configurable, is located at 40 m and referred to as 40.0 Ref.)	30 40.0 ref 60 80 100 120 140 160 180 200 250	17.4 s ³	600	600	0.1 m/s 1°	Yes								
		Gill Windsonic M	4						1	600	600	0.01 m/s, 1°	Yes			
		Nortek Aquadopp	-1						Current speed and direction profile, water temperature (at 1 m depth)	TNWA	TNWB	1	600	600	2 cm/s 1° 0.1 °C	Yes
										-3	-3					
										-4	-4					
														
										-37	-37					
		Vaisala PTB330A	0.5						Air pressure	0.5	30	60	600	0.05 hPa	Yes	
Vaisala HMP155	4.1			5	60	600	0.1 °C	Yes								
Thelma WLS	Sea floor	Water pressure	TNWA	TNWB	1	600	600	0.5 mbar 0.1 °C	Yes							
		Bottom Water Temperature	-36	-36												

¹ Height relative to actual sea surface. The depth of the WLS is an approximate number.

² A burst of measurements is the raw data time series used to calculate the average parameters. The burst interval is the time from the beginning of one burst to the beginning of the next burst, and equal to the interval between writing of raw data to disk and transmissions. Note that wave bursts overlap by 424 s.

³ This is the approximate time between the beginning of one sweep of the profile and the next one; the interval may vary slightly. The ZephIR sweeps one level at a time beginning at the lowest one. After the top level has been swept, it uses some time for calculations and re-focusing back to the lowest level for a new sweep. A minimum of 9 samples per height must be measured in the 10-minute interval in order to produce wind speed and direction, and derived parameters thereof. This applies after signal-noise filtering internally in the LiDAR is carried out.

3. Data flow, post-processing and quality control

This chapter outlines the data flow, measurement principles for each instrument, processing steps and quality control measures applied to the data before they are delivered to RVO.

3.1 Data flow

For each instrument on a SWLB, the measurement processes are set-up individually according to the resolution needed. The measurements are stored in the onboard in-memory database and, every 10 minutes, packed into encrypted messages and stored. Selected measurements are averaged over 10 minutes and/or used in internal processes together with other measurements from other sensors:

- GPS position and current data (Aquadopp-produced 10-minute-averages) are delivered by these instruments every 10 minutes for storage. No further treatment of either data is done on board.
- Air pressure, temperature, and humidity measurements as well as data from the bottom mounted Thelma pressure sensor are stored in the internal memory database at their respective measurement rates. 10-minute-averages are calculated for storage every 10 minutes.
- Wave parameters are calculated onboard from raw data as described in [Section 3.2.2](#) and stored every 10 minutes.
- Heading information (compass and DGPS) and data from the Gill sensor are continuously stored at 1 Hz and averaged for each 10-minute interval. In addition these measurements are also made available in real time for the LiDAR processes and used as described in [Section 3.2.3](#).
- The LiDAR unit measures at 1 Hz. The LiDAR data are combined with buoy heading information to reference buoy direction to north before calculating the 10-minute-averages. Averaging over 10 minutes also serves as motion correction.

The buoy converts all measurements to physical quantities in SI units. Every 10 minutes the data are timestamped and packed for simultaneous transmission and storage in binary integer numbers using a proprietary compression algorithm (pff), giving sufficient digital resolution while using minimal storage space. The digitization resolution is given in [Table B.1 - Table B.5](#). The digitization resolution is higher than the actual measurement resolution ensuring lossless compression. The high resolution also ensures that there is no biasing effect due to the digitization of the data. The data are stored in several pff messages to further minimize filesize.

For in-house re-processed data the pff digitization is not applied and the calculations are done in double precision floating point space. The data are then written to file with `%11.6f%` precision.

Each SWLB is set up with unique telemetry message identifiers. Together with deployment records, timestamps and position data, the datasets for each of the buoys/stations in this campaign will be kept separate and will be unique.

Data measured at each buoy is simultaneously both stored locally and transmitted via satellite to allow for near real-time operations checks, maintenance scheduling and monthly reporting. At the receiving end the data are unpacked to physical values in real numbers using the reverse conversion method. The application of the compression algorithm also means that the data in transmission are encrypted. The dataset presented in this report is therefore binned according to the digitization resolution.

When a buoy is serviced, the following stored data are downloaded:

- stored pff messages
- raw data stored in the geni data logger (Aquadopp bin files, Thelma raw data)
- raw data stored on the major instruments (LiDAR, DGPS) as they have their own independent storage capacity

10-minute averages stored in the pff messages on the geni datalogger form the basis of this report. This circumvents gaps due to transmission problems. In addition any data downloaded during a service (pff and raw) are used to investigate gaps in the data set that occurred during the deployment. When necessary and if available (no other instrument issues), the data can be re-processed using raw data and used to fill gaps.

3.2 Measurement principles

3.2.1 Heading sources

There are two main heading sources on each SWLB: the magnetic compass and the DGPS system. The compass gives direction relative to magnetic north, while the DGPS system gives direction relative to true north. For wind direction, the Gill sensor uses the compass as heading source, while for the LiDAR wind directions the DGPS system is the main heading source. However, wind directions from the LiDAR can also be given using the magnetic compass as heading source if the DGPS system is unavailable. Raw 1 Hz heading data are stored on disk as backup/fallback. Each mast and instrument is mounted such that all instruments are correctly aligned to the buoy reference and that no directional bias due to mounting is present.

In addition the Wavesense and Aquadopp each have a built-in compass that is used as heading source to align the wave and current directions respectively (both relative to magnetic north).

Note that at TNW, the deviation between magnetic and true north is $\leq 1^\circ$ and thus negligible.

3.2.2 Waves

The wave measurements are based on the fact that the discus shaped buoy will respond to the waves by following the height and slope of the waves, so that the wave motion can be interpreted as the motion of the sea surface. The Wavesense 3 wave sensor employs accelerometers, rotation sensors and a compass to calculate the position, velocities and rotations of the buoy in all directions in space. From these data the spectra of wave height and direction are calculated, and the parameters of wave height, period and direction listed in wave parameter definitions [Table -1](#) are calculated.

The wave parameters are based on a time series of 1024 1Hz values, i.e. 17 minutes ($1024 \text{ s} \approx 17 \text{ min}$). When the acquisition is complete, the analysis phase starts using FFT (Fast Fourier Transform) algorithms. Wave bursts overlap by 424 s, i.e. data is collected for 1024 s, but data is analyzed and written to file every 600 s. Approximately 25 minutes in total are needed for a full measurement cycle, including "heat-up", 17 min sampling and time to run FFT analysis. The measurements are taken continuously and the processing windows overlap.

Maximum wave height, h_{max} , and the period of the highest individual wave, t_{max} , are calculated by "zero upcrossing" analysis and require 50 "high" waves in 17 min. This means that h_{max} will not be calculated when significant wave height, h_{m0} , is less than approximately 0.3 m.

In addition to the 10-minute wave parameters, raw 1 Hz compass, heave, pitch and roll data are stored on disk

as backup.

The directional wave spectra are estimated from the directional Fourier components using the Burg Maximum Entropy method (MEM) [13] with $f_{min} = 0.01$; $f_{max} = 0.50$; $df = 0.01$; $nfreq = 50$; $units = Hz$; $dirmin = 0$; $dirmax = 352.5$; $ddir = 7.5$; $ndir = 50$; $units = degrees$. The MEMspec data files contain the 2-dimensional directional spectral density $S(f, \Theta)$ in addition to other spectral parameters. The wave spectra were post-processed to higher digital resolution using the raw compass, heave, pitch and roll data than what was produced on the buoy while at sea. There is a 20 min offset between the data in the memspec files and the timeseries. Spectra are stamped like the time series, rounded back to the beginning of the measuring interval. Parameter records from real time processing are stamped at the time of recording, which is rounded forward to the end of the recording interval. A timestamp in the timeseries datafile of <20190301 12:20> corresponds to the data in the memspec file of start time with stamp <20190301 12:00>.

Note: Calculations of wave parameters done onboard the buoy use the measured data before binning. Thereafter data is stored, both raw and calculated. During this storage process, the data is digitalized with a given resolution (i.e. binned). If the stored raw data or memspec files are used to re-calculate the wave parameters, there may be small differences compared to parameters calculated onboard the buoy. The resolution settings are, however, set such that the differences are insignificant (better than the accuracy).

3.2.3 Wind

There are two types of wind sensors on the LiDAR buoy: *Gill Windsonic* and *ZephIR ZX300 LiDAR*. The drawing in [Figure 2.1](#) shows the location of these sensors, and illustrates the LiDAR beams. Heights indicate the levels of the LiDAR optical window (2 m), the height of the Gill sensor (4 m), and the lowest and highest possible LiDAR profile levels, all relative to the sea surface.

The *Gill Windsonic* is an ultrasonic wind sensor measuring the wind along the two horizontal axes defined by the sensor transmitting and receiving elements. The travel time difference of ultrasound emitted in opposite directions along the two perpendicular axes is used to calculate the wind speed components along those axes. From the components the wind speed and direction relative to the instrument's x-axis is computed. Then the wind direction relative to magnetic North is calculated using the measurement of buoy heading from the buoy's compass. An important function of the Gill Windsonic sensor is to be a reference for wind direction as the LiDAR is known for its 180 ° ambiguity.

The *ZephIR LiDAR* is a Continuous Wave (CW) LiDAR system. The continuous beam emitted from the window at the top of the LiDAR is slanted at an angle from the vertical and rotates with a period of 1 second around the central axis to continually scan a cone in the air. The return is focused to a particular elevation using an optical focus stage and samples individual line of sight points around the circle. The magnitude of the Doppler shift of the backscattered individual line of sight samples is used to reconstruct the 1 second wind field at a particular elevation.

The LiDAR focuses at each of the 10 pre-selected heights in sequence sampling the wind profile. Before going back to another profile, the LiDAR spends some time doing other tasks, such as looking for precipitation, fog and cloud base, and measuring at the reference height of 38 m above the laser. The effective interval between each profile is about 17 s.

The profiles collected at 17 s intervals are averaged to give a time series of 10-minute average horizontal and vertical wind which are stored on the LiDAR unit but not used by the SWLB system. The SWLB Wavesense 3 processing unit, takes the raw 1 Hz LiDAR data and uses data from the buoy's compass and/or the DPGS

system to produce the 10-minute averages relative to north. From the components the wind speed and direction relative to the instrument's x-axis are computed. Then the wind direction is calculated using the measurement of buoy heading from Septentrio DGPS. Wind directions are also checked in real-time against the data from the Gill wind sensor to resolve the 180° ambiguity in the results due to the ambiguity in the magnitude of the Doppler shift. In addition to being stored on the LiDAR unit itself, the 1 Hz data from the LiDAR are also stored on the geni data logger independently of the LiDAR unit as second backup.

Up to a total of 36-37 wind data packages are collected in 10 minutes. A minimum of 9 packages (25 %) are required to qualify as a valid measurement.

Averaging over 10 minutes also serves as motion correction.

The LiDAR is equipped with a met. station that includes a compass. This is however not used as primary source for resolving the 180° ambiguity of the LiDAR, but is available as fallback/backup. Any errors in the met station thus do not impact the LiDAR wind measurements except for instances where the LiDAR unit is restarted.

Inflow angle, wind veer and wind shear are derived from the underlying measured physical quantities in post-processing.

3.2.4 Current measurements

The *AquaDopp current profiler* is mounted in the buoy hull with the acoustic head immediately below the hull facing vertically downward. The three slanted transducers emit sound pulses forming 3 acoustic beams at an angle from the vertical. The Doppler shift of sound echoed from particles such as plankton in the water is used to calculate the current velocity component along the beam. The vertical and horizontal velocity components are then calculated, and a large number of pulses are used to calculate the 10-minute average current velocity.

Signal-to-noise (here amplitude) information is stored internally in the current profiler and in the data logger. A high-pass filter on amplitude is applied to the current data using the beam with the lowest signal strength.

3.2.5 Air temperature and humidity

The Vaisala HMP155 measures air temperature and humidity using a state of the art HUMICAP® 180R humidity sensor element and a fast temperature probe. The mounting of the sensor in a protective housing on the mast top sensor carrier ensures that the sensor is exposed to free air and yet shielded from cooling and heating due to solar and diffuse radiation.

Air temperature is also recorded by the LiDAR met station. The LiDAR met station is placed in the top of the second mast. It is, however, not equipped with a shield like the main sensor. The data from this sensor is thus expected to be of lower quality than the main temperature sensor and is provided as supporting data. Calibrations of the LiDAR met station sensors are not verified.

3.2.6 Air pressure

The Vaisala pressure sensor PTB330A inside the buoy includes Vaisala's top class BAROCAP® pressure sensing technology. The sensor is exposed to the pressure of the open air through a diffusor head on the mast which removes the pressure reducing effect of the wind from the air pressure measurement.

Air pressure is also recorded by the LiDAR met station. The data from this sensor is expected to be of lower

quality than the main air pressure sensor and is provided as supporting data. Calibrations of the LiDAR met station sensors are not verified.

3.2.7 Water level

Water level is inferred from measurements of water pressure at the seabed following IOC guidelines [14]. The bottom mounted pressure sensor gives out an approximate value of water level as the actual pressure in dbar minus 10 dbar which is then approximately equal to the depth in metres. However, to get the proper height of the water column above the sensor, the air pressure measurement from the buoy must be subtracted from the total measured water pressure as follows:

$$h_w = (P_w - P_a) / \rho g \quad (3.1)$$

where h_w is the height of the water column, P_w is the measured total water pressure, P_a is the measured total air pressure, ρ is the average density of the water (1025.7 kg/m³) according to average temperature and salinity data from this area stored by ICES (International Council for the Exploration of the Sea), and g is the normal acceleration of gravity.

Water level referenced to LAT is then:

$$wl = h_w + LAT \quad (3.2)$$

where LAT is a site specific conversion parameter to convert to LAT. The parameters used in each deployment are given in [Table 3.3](#).

The vertical position of the sensor relative to the mean sea level position is obtained from bathymetry data at the deployed coordinates, as shown in [Table 1.1](#). The pressure sensor head is assumed to be located nominally 1.00 m above the seabed.

3.2.8 Water temperature

Water temperature is recorded by 2 main instruments at 2 different water depths: the NORTEK Aquadopp Current profiler (~1 m depth) and the Thelma bottom sensor (seabed).

The water temperature sensor in the NORTEK Aquadopp is used as the main water temperature sensor. This sensor is placed in a "well" on the buoy and is thus measuring the water temperature right under the buoy hull, i.e. ~1 m below the water surface.

Bottom water temperature near the seabed is measured by the Thelma bottom sensor at nominally 1 m above the seafloor. Calibration certificates for this temperature sensor are not available and the data is thus provided as supporting data.

In addition, there is a temperature sensor in the top (acoustic) modem for the water level sensor. This modem is placed inside the keel weight, i.e. ~2 m below the surface. Due to different depths the water temperature will not be the same, especially on calm, warm days when the water is heated from the surface and on calm, cold days with clear sky when the water is cooled from surface. This temperature measurement is included in the data set as supplementary data.

3.2.9 Buoy position (GPS)

Coordinate positions with latitudes and longitudes are measured by two systems on the LiDAR buoy, the Iridium GPS and the Septentrio GPS. The latitudes and longitudes recorded from these two systems are compared

to verify the positioning of the buoy.

In addition, the position measurements from the LiDAR met station are also provided as supporting data. This sensor is however showing slow response.

3.3 Post-processing

3.3.1 General steps and filtering

No tampering or modifications are applied to increase the post-processed availability or enhance the data quality. In post-processing the system integrity is maintained. Post-processing is limited to use of data from the system itself, not depending on use of data from any external sources.

Post-processed data are those values following the steps below. Post-processing is therefore limited to qualifying those quantities by:

1. Deployment period, i.e. removing values outside of those times where the system is deployed at the target position (e.g. in transit to/from shore or onshore)
2. Check that data was saved for all 10-min intervals. If not, substitutions of NaN values when all data for a 10-min time step is missing
3. Removing duplicated measurements (if **all** measurements/parameters by one sensor are repeated from one time step to the next, the duplicated values are removed)
4. Removing out of range values (e.g degrees above 360) and replacement by NaN (see [Table 3.2](#))
5. Applying parameter group / instrument specific quality control measures outlined below for each group
6. Inspection and assessment (QA/QC) by senior meteorologist/oceanographer

Note: Single duplicated values present in the processed dataset are most likely due to measurement resolution, digital binning and/or slow changing physical processes (e.g. water temperature). E.g. if any one of the components of the wind vector (horizontal, vertical or direction) has changed, then all of them must have been updated since they are stored simultaneously (atomically) by the same process and are compressed into the same pff-telegram. If the horizontal component is then repeated twice, it must be because it fell in the same digital step. This can happen during stable conditions.

QA/QC filter flags are given as integers in separate "Flags" files for each parameter set:

Table 3.1: QA/QC filter flags indicating which filter was applied (and data points replaced by NaN) for each parameter (with reference to the processing given in the list above).

Flag value	Text code	Description	Filter reference
0	Good data	Passed all tests	
1	Duplicated set	Duplicated set of values from 1 sensor found and removed	item 3
2	Consecutive duplicate		
3	Out of bounds	Value out of valid range (Table 3.2) found and removed	item 4
4	Outlier	outlier found and removed	
5	Low signal strength	signal strength below threshold and value removed	item 4
6	Flipped 180°	180 ° ambiguity found and LiDAR wind direction flipped 180°	
7	Low packet count	Number of valid LiDAR wind measurements below threshold LiDAR	
8	Missed Transmission	No data saved for this 10 min interval	item 2
9	Not evaluated / failed	Not evaluated or failed	

The following QA/QC filter ranges were used for each parameter (group):

Table 3.2: QA/QC filter ranges for each parameter

Parameter (group)	Min	Max	Unit
Horizontal Gill wind speed	0.001	35	m/s
Horizontal LiDAR wind speed	0.001	58	m/s
Vertical LiDAR wind speed	-6	6	m/s
Vertical LiDAR wind speed	0.0127	0.0127	m/s
Wind direction	0	360	°
Inflow angle	-15	15	deg
LiDAR packet count	9	40	packets
Current speed	0	135	cm/s
Current direction	0	360	°
Current signal strength	30	128	dB
Wave height	0.1	24	m
Hmax	0.1	24	m
Wave period	0.01	23	s
Wave direction	0	360	°
Air humidity	0	101	%
Air pressure	905	1100	hPa
Air temperature	-10	35	°C
Water temperate	0	25	°C
Bottom water temperature	0	25	°C
Water pressure	30	40	dbar

Details on post processing for each parameter group are given in the following sections below.

3.3.2 Wind data post processing

The following steps were applied to the wind data:

1. Check for duplicated measurements (Duplicate to Nan (all))
2. Filter Gill speed and direction (Gill only)
3. Filter LiDAR speed (horizontal and vertical speed only)
4. Filter LiDAR direction
5. Filter LiDAR on packet count (all)
6. Filter vertical wind speed (+-6 m/s, == 0.0127 -> NaN)
7. Apply 180° ambiguity fix on LiDAR wind directions using Gill directions
8. Calculate inflow angle and filter
9. Calculate wind sheer and wind veer
10. Translate LiDAR info and status flags
11. Calculate wind system availability for 4-200 m

Please note the following:

- (a) All LiDAR wind data for was reprocessed in-house from raw 1hz zph, 1hz Septentrio heading or 1hz compass heading and 4m Gill wind direction.
- (b) Standard deviation, TI, windMin and windMax were only included in packet count filtering.
- (c) Wind speed and wind direction quality filtering was decoupled which leads to up to 3% difference in availability for some deployments.
- (d) Wind data for deployments D03, D06, end of D07 (November and December 2020), D09, and D11 was reprocessed using compass as heading source.
- (e) For D03 and D06, WS170, LiDAR wind direction was reprocessed with compass heading following damage to the main mast during a storm in Feb 2020 (see [Section 4.3](#)). In addition, the mast carrying the Gill wind sensor on WS170 was slightly turned from neutral causing an offset in the Gill wind direction by a fairly constant 8°. The wind direction from the Gill sensor was corrected for the mast turn (-8°). The 180-degree ambiguity was then applied to the LiDAR wind direction with the corrected Gill direction as reference.
- (f) For D07, WS191, LiDAR wind direction is given with DGPS heading from deployment start until end of October 2020. Due to outage of the DGPS system, wind direction for the last 2 months (Nov - Dec 2020) was reprocessed using compass heading.
- (g) LiDAR wind direction for D09, WS156, uses compass as heading source since WS156 was not equipped with the DGPS system.
- (h) LiDAR wind direction for D11, WS187, uses compass as heading source due to outages of the DGPS system during the deployment.
- (i) At the end of deployments D01, D02, D03, D05 and D12, the LiDAR units stopped.
- (j) The highest LiDAR height for D13 is 240 m.
- (k) Fugro cannot guarantee that all ambiguous 180° data are flagged.

Please note that for in-house re-processed data the pff digitization is not applied and the calculations are done in double precision floating point space. The data are then written to file with %11.6f% precision.

3.3.3 Wave data post processing

The following steps were applied to the wave data:

1. Check for duplicated measurements (Duplicate to Nan (all))
2. Filter wave height, wave period and wave direction as given in [Table 3.2](#) above
3. Check for $h_{max} < h_{m0}$ and remove if found
4. Calculate wave system availability excluding parameters derived from zero upcrossing (h_{max} , th_{max} , tz)

All wave spectra (in memspec files) were reprocessed in house.

3.3.4 Current data post processing

The following steps were applied to the current data:

1. Check for duplicated measurements (Duplicate to Nan (all))
2. Filter current speed and direction for all depths

For the bins close to the seafloor, seafloor effects have not been taken into account.

- (a) During deployments D01 and D02, the sum of the signal strengths of all beams was stored onboard instead of the signal strength of the lowest beam. The lowest amplitude was extracted from the raw .prf files in post-processing and substituted into the main dataset for the time periods that the raw files cover.
- (b) For all deployments, except D05 and D12, current speeds at -3 to -5m appear too low. This could be sheltering/shadowing from the buoy (Mueller et al, 2007, doi:10.1061/(ASCE)0733-9429(2007)133:12(1411)).
- (c) During deployments D02, D04 and D05, a "step" at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3. Beams 1 and 2 were unaffected. For the D02 data this "step" is much less pronounced and much less visible in the raw data than for D04 and D05. Therefore the following was decided:
 - For D02, the full profile was kept. The top 10 m are considered unaffected and accepted data. For the profile from 11 m and below, the filter flags are set to "suspicious" and quality flags to "fail".
 - For D04 and D05, the dataset was cut off from 11 m and below keeping only the top 10 m of unaffected and accepted data.
- (d) During deployments D09 and D12 the Aquadopp current meters failed.

3.3.5 Water level

For water level, the LAT conversion parameters used in each deployment are given in [Table 3.3](#). The difference between MSL and LAT at TNW is ca 1 m (NLLAT2018 reference surface, Dutch Hydrographic Service).

- (a) At TNWA, during the first deployment operation, the water level sensor failed and no water level is available for D01 and D03.
- (b) During D02, TNWB, the transition period 2019-08-20 00:10 - 2019-10-08 00:00 was removed.
- (c) During D05, TNWA, a change in min/max water pressure after 2020-06-03 accompanied by sudden increase in sensor tilt was discovered. Data from 2020-06-03 until end of D05 were deemed failed and removed.
- (d) Water pressure and water level data from D07 were removed for the same reason as D05 (same sensor on same mooring).

- (e) At TNWB, after the drift of WS190 at the end of D08, the mooring including the water level sensor was recovered. No new water level sensor was deployed and no water level data is available for D09, D11, D12 and D13.

Table 3.3: LAT conversion parameter used in each deployment.

Deployment	Station	Time interval	LAT constant used in conversion
D1	TNWA	D1	-
D2	TNWB	2019-06-19 06:00 - 2019-08-20 00:00	-35.67
		2019-08-20 00:10 - 2019-10-08 00:00	removed
		2019-10-08 00:10 - 2020-01-22 10:10	-37.50
D3	TNWA	D3	-
D4	TNWB	D4	-35.76
D5	TNWA	D5	-36.04
D6	TNWB	D6	-35.83
D7	TNWA	D7	-
D8	TNWB	D8	-35.95
D9	TNWB	D9	-
D10	TNWA-2	D10	-35.32
D11	TNWB	D11	-
D12	TNWB-2	D12	-
D13	TNWB-2	D13	-

3.4 Post-processing version number

For each deployment, a separate LAT conversion parameter was applied, see [Table 3.3](#).

Thereafter, all tests laid out in this chapter were applied to all deployments in the same order using the following version of the processing script: TNW.24M.09September2021.

3.5 Quality control

Fugro follows the international standard recommendations ISO-19901-1:2015 for the collection and supply of oceanographic data, in general:

1. To verify the proper functioning of the measuring and recording systems.
2. Qualified personnel conduct the observations, selection, installation, checking and maintenance of the equipment.
3. For data quality control procedures.

Data are first checked for gaps, instrument and buoy operation issues and timestamp and compass alignment as well as duplicated values indicating potential instrument or data logger issues. Data plots are prepared during post-processing showing the original data set and the effect of the post-processing filters applied. In general all the measured parameters are expected to vary over time, more or less depending on the parameter. In addition the sensors represent parameters that are dynamic and variations in one parameter are typically coupled to variations in one or several other parameters.

The quality control steps are divided into the following categories:

1. Buoy operation:
 - “Household” parameters, i.e. power supply (fuel cells, batteries, power consumption by instrument), error logs, and position data are used to assess the function of the buoy.
 - Any reboots and power supply issues leading to loss of data are identified here.
 - Buoy position is checked to verify the buoy stayed in position during the deployment.
 - Info and status flags from the ZephIR LiDAR unit are stored as part of the household parameters and are used to track the functionality of the LiDAR unit.
2. Variation of single parameters:
 - Some degree of variation is expected. Duplicated values and missing data are indications for instrument operation issues.
 - The measured data are checked against ongoing weather conditions. Reasonable agreement with the nearest weather observations is expected.
 - For currents the diurnal and semidiurnal variations due to the tides should be observed.
3. Variation of related parameters:
 - Humidity and air temperature are expected to increase in rain and fog.
 - The wave period will generally increase with increasing wave heights.
 - Correlation between speed and direction at adjacent levels for both wind and currents is expected.
 - Reasonable agreement between Gill and LiDAR measurements is expected.
 - The gust (from Gill sensor) should be 10-40 % higher than the wind speed.
 - Wind against waves (e.g. high waves during high winds, low winds with long swells, wind from offshore expect correlation between increasing wind speed and wave height).
4. Variation between buoys:
 - Taking variations between the buoys due to location/distance/water depth into account.
 - Air pressure should be very similar.
 - Temperature (both in air and water) should not differ by more than 2-3 ° C.
 - Wind speed and direction should be correlated.

After internal QA done by Fugro during post-processing, the dataset is given to Deltares for validation. Deltares first checks for consistency within the dataset, data files and whether any outliers are present and provides feedback.

If any issues are identified by Deltares, these are checked again by Fugro and dealt with in one of the following ways:

1. If a dataset formality (header lines, file name inconsistency, corrupted file) is identified: the file error is corrected.
2. Status data is checked to determine any buoy operating problems (eg voltage) at the time of the issue in question. Additional parameters are checked to check for packing/saving inconsistencies. Issue is then either determined real and left in dataset and noted for discussion or deemed operating problem and removed with flags files updated accordingly.
3. If an outlier is found: filtering is double-checked, other related parameters and status data are checked. If deemed filter failure, outlier is removed and filter flags are updated. Otherwise outlier is kept in dataset and noted for discussion.

If data points are removed, an updated dataset is issued to Deltares to use in the validation. [Table 1.3](#) lists the data files after all quality control measures that are ultimately used in the validation.

Deltares proceeds then with the validation of the data set as described in [\[1\]](#).

This is the same dataset as provided accompanying this report.

3.6 Data Quality Flags

Data quality is summarized in data quality flag files provided for each datafile of the same dimensions: <number_of_timesteps> x <number_of_columns> of that data-file (i.e. 'mirror' of the datafile itself). Flags are given as integers (0 to 6, 9) for each parameter, for each timestep. Details about the flagging convention applied are given in [Table 3.4](#).

Table 3.4: Quality flags.

Flag	Primary level / short name	Definition
0	Publication	Data have passed critical final quality control tests (real time and post-analysis), manual inspection and are deemed adequate for use as final data for publication to the market.
1	Pass/good	Data have passed critical real-time quality control tests and are deemed adequate for use as preliminary data.
2	Not evaluated, not available or unknown	Data have not been QC-tested or validated or the information on quality is not available.
3	Questionable / suspect	Data are considered to be either suspect or of high interest to end-users by Fugro. They are flagged suspect to draw further attention to them by end-users.
4	Questionable / suspect	Data are considered to be either suspect or of high interest to end-users. They are flagged suspect by the data validation process by external party to draw further attention to them by end-users.
5	Fail / bad	Data are considered to have failed one or more critical real-time or post QC checks by Fugro.
6	Fail / bad	Data are considered to have failed one or more critical real-time or post QC checks by the data validation process.
9	Missing data	Used as a placeholder when data are missing.

3.7 Calculations of data availability from the SWLB

Data availability in this report is given per signal as to show data entries per time series and per system (wind, waves, currents, air pressure, temperature, water level) ([chapter 5](#)).

The *Post-processed Data Availability per signal* for each deployment is calculated by dividing the number of data entries remaining after subtraction of all non-valid entries by the maximum possible number of 10-minute data entries within the respective deployment based on the given time interval of 10-minutes.

Non-valid entries refer to those caused by including but not limited to:

- downtime (due to equipment failure, maintenance, severe weather, damage, malfunction, theft, or any other events),
- any system filtering resulting in data rejection, flagged and defined,
- application of quality filters based on the system's own parameters, defined in [Section 3.3](#).

The Deployment Post-processed System Data Availability is determined as follows:

- a. Wind: Average of the 10-minute averaged post processed data availabilities per measured elevation, speed and direction up to and including 200 m from the LiDAR*. The wind data set also include near surface wind speed and direction, i.e. wind measured in mast top (4 m height) by the Gill Windsonic sensor.
- b. Wave: Average of wave parameters (10-min frequency), excluding hmax and thmax.
- c. Current: Average of current speed and direction over the water column.
- d. Water level: Thelma.
- e. Atmospheric pressure: Vaisala.
- f. Temperature: Average of air and sea surface temperature.

* Wind speed and direction are also measured at 250 m but are considered exploratory.

Note: In the case of multiple (redundant) measurement instruments determining one parameter value, the availability of at least one parameter value determines the data availability.

Signal and system availability are given for each buoy separately. The data files presented do not combine data from the buoys. However, the buoys are deployed for redundancy reasons, so it is possible to increase data availability for a certain parameter by combining data from buoys measuring in parallel.

4. Deployments

This chapter provides detailed information on each deployment including specific issues during the deployment period, switches of equipment, data gaps and statistics for selected parameters.

4.1 Deployment 1: TNWA - WS190

Table 4.1: Details on Deployment 1

Station	TNWA
Buoy	WS190
Duration	2019-06-19 04:50 - 2020-01-22 08:30
Summary	Buoy WS190 was deployed in the TNWA location on 19 th June 2019 and stayed in position until 22 nd January 2020.
Issues	The water level sensor malfunctioned upon deployment. There is no water level data for this deployment In December 2019 the communication between the LiDAR and the buoy data logger was functioning intermittently with frequent data gaps. The LiDAR unit stopped on 28 th December 2020 due to wedge rotation failure.
Service	After Deployment 1, the LiDAR unit was sent to ZephIR for repairs.
Post-processing	LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy). Current data filtering was updated in-house to the campaign year 2 standard using lowest Amplitude (as compared to the monthly reports). Wave spectra (memspec files) were post-processed in-house.

Table 4.2: Post-processed system availability as per Section 3.7 in % during TNW Deployment 1.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
86.0	100	0.0	96.5	100	98.0

Table 4.3: Wind speed statistics during TNW Deployment 1: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	7.61	19.0
	3-second gust	4	9.96	27.1
ZephIR LiDAR	10 min mean wind speed	30	9.10	25.0
		40	9.22	26.0
		60	9.51	26.4
		80	9.71	27.0
		100	9.84	27.6
		120	9.96	28.4
		140	10.07	28.4
		160	10.16	28.4
		180	10.24	28.7
		200	10.32	29.6
		250	10.48	29.5

Table 4.4: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 1.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	973.34	1011.94	1045.51
Air Temperature	°C	4.0	2.67	13.17	23.73
Humidity	% R.H.	4.0	47.37	79.58	97.86
hm0	m	0.0	0.12	1.62	6.32
hmax	m	0.0	0.31	2.40	10.11
thmax	s	0.0	2.55	6.23	22.87
tm01	s	0.0	2.66	5.10	9.77
tm02	s	0.0	2.55	4.79	9.05
tp	s	0.0	2.05	6.57	18.60
Water Temperature	°C	-1.0	8.16	14.59	21.58
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.2 Deployment 2: TNWB - WS191

Table 4.5: Details on Deployment 2

Station	TNWB
Buoy	WS191
Duration	2019-06-19 06:00 - 2020-01-22 10:10
Summary	Buoy WS191 was deployed in the TNWB location on 19 th June 2019 and stayed in position until 22 nd January 2020.
Issues	<p>In October 2019, the communication between the LiDAR unit and buoy data logger worked intermittently. Data was stored internally in the LiDAR and could be downloaded at service in January 2020.</p> <p>In December 2019, the LiDAR unit worked intermittently until it stopped on the 22nd December 2019.</p> <p>Water level sensor moved to a deeper position on 15th September 2020.</p>
Service	<p>Regular maintenance and refuelling after deployment.</p> <p>The LiDAR unit was checked remotely by ZX LiDARs. No faults were found. Operational after service.</p>
Post-processing	<p>LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy).</p> <p>Current data filtering was updated in-house to the campaign year 2 standard using lowest Amplitude (as compared to the monthly reports).</p> <p>During deployment D02, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3. Beams 1 and 2 were unaffected. For D02, the full profile was kept. The top 10 m are considered unaffected and accepted data. For the profile from 11 m and below, the filter flags are set to "suspicious" and quality flags to "fail".</p> <p>Wave spectra (memspec files) were post-processed in-house.</p> <p>Water level data was reprocessed in-house. The transition period 2019-08-20 00:10 - 2019-10-08 00:00 was removed.</p>

Table 4.6: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 2.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
77.5	100	71.9	23.5	100	98.9

Table 4.7: Wind speed statistics during TNW Deployment 2: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	7.88	19.6
	3-second gust	4	10.15	26.6
ZephIR LiDAR	10 min mean wind speed	30	9.03	25.7
		40	9.16	26.6
		60	9.46	27.0
		80	9.67	27.8
		100	9.81	27.5
		120	9.93	28.7
		140	10.04	29.1
		160	10.13	28.8
		180	10.22	29.0
		200	10.29	29.5
		250	10.46	29.7

Table 4.8: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 2.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	974.51	1012.26	1045.70
Air Temperature	°C	4.0	2.78	13.18	23.67
Humidity	% R.H.	4.0	48.23	80.84	98.94
hm0	m	0.0	0.12	1.62	6.02
hmax	m	0.0	0.31	2.42	12.97
thmax	s	0.0	2.55	6.24	22.97
tm01	s	0.0	2.66	5.09	9.97
tm02	s	0.0	2.45	4.77	9.16
tp	s	0.0	2.05	6.57	18.60
Water Temperature	°C	-1.0	8.16	14.57	21.58
Water Level	m LAT	-36.0	0.05	1.41	2.34

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.3 Deployment 3: TNWA - WS170

Table 4.9: Details on Deployment 3

Station	TNWA
Buoy	WS170
Duration	2020-01-22 09:30 - 2020-04-11 06:50
Summary	Buoy WS170 was deployed in the TNWA location on 22 nd January 2020 and stayed in position until 11 th April 2020.
Issues	<p>There was no new water level sensor deployed with this buoy. There is no water level data for this deployment</p> <p>SWLB WS170 suffered damage to the main mast during a storm on 9th of February 2020 resulting in an offset in the DGPS heading data making DPGS heading unusable. The LiDAR unit was unaffected.</p> <p>The mast carrying the Gill wind sensor was turned from neutral causing an offset in the Gill wind direction by a fairly constant 8°.</p> <p>3 fuel cells stopped working after the storm leading to decreased power availability.</p> <p>The LiDAR unit stopped on 27th March 2020 due to lack of power.</p>
Service	<p>Regular maintenance and refuelling after deployment. Replacement of fuel cells.</p> <p>Replacement of air temperature and humidity probe.</p>
Post-processing	<p>The wind direction from the Gill sensor was corrected for the mast turn (−8°). The 180-degree ambiguity was then applied to the LiDAR wind direction with the corrected Gill direction as reference.</p> <p>LiDAR wind speed and direction were post-processed in-house using compass as heading.</p> <p>Wave spectra (memspec files) were post-processed in-house.</p>

Table 4.10: Post-processed system availability as per Section 3.7 in % during TNW Deployment 3.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
69.8	99.9	0.0	100	100	61.1

Table 4.11: Wind speed statistics during TNW Deployment 3: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	9.00	23.2
	3-second gust	4	11.69	32.6
ZephIR LiDAR	10 min mean wind speed	30	11.60	30.6
		40	11.89	31.0
		60	12.35	32.7
		80	12.87	33.9
		100	13.17	34.9
		120	13.46	35.8
		140	13.72	35.8
		160	13.97	37.1
		180	14.17	38.1
		200	14.35	39.0
		250	14.72	42.9

Table 4.12: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 3.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	975.68	1012.38	1037.40
Air Temperature	°C	4.0	3.85	7.33	9.71
Humidity	% R.H.	4.0	67.68	85.76	99.04
hm0	m	0.0	0.25	2.12	7.57
hmax	m	0.0	0.33	3.12	15.70
thmax	s	0.0	2.55	6.97	22.87
tm01	s	0.0	3.06	5.66	9.36
tm02	s	0.0	2.96	5.25	8.75
tp	s	0.0	2.66	7.68	19.31
Water Temperature	°C	-1.0	6.70	7.42	9.10
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.4 Deployment 4: TNWB - WS191

Table 4.13: Details on Deployment 4

Station	TNWB
Buoy	WS191
Duration	2020-04-11 06:10 - 2020-06-24 06:50
Summary	<p>After refueling WS191 was deployed in the TNWB position on 11th April 2020 and stayed in position until 24th June 2020.</p> <p>A new water level sensor was deployed at TNWB together with WS191.</p>
Issues	No irregularities.
Service	Regular maintenance and refuelling after deployment.
Post-processing	<p>LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy).</p> <p>Wave spectra (memspec files) were post-processed in-house.</p> <p>During deployment D04, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3. Beams 1 and 2 were unaffected. For D04, the dataset was cut off from 11 m and below keeping only the top 10 m of unaffected and accepted data.</p> <p>Water level data was reprocessed in-house.</p>

Table 4.14: Post-processed system availability as per Section 3.7 in % during TNW Deployment 4.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
88.8	99.9	98.6	23.5	100	97.2

Table 4.15: Wind speed statistics during TNW Deployment 4: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	5.51	13.9
	3-second gust	4	7.04	18.6
ZephIR LiDAR	10 min mean wind speed	30	6.87	17.2
		40	7.09	17.7
		60	7.49	18.0
		80	7.78	17.9
		100	7.97	18.7
		120	8.12	19.3
		140	8.26	20.2
		160	8.37	20.8
		180	8.45	21.4
		200	8.53	21.5
		250	8.69	23.1

Table 4.16: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 4.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	989.16	1017.77	1037.11
Air Temperature	°C	4.0	4.82	10.77	19.21
Humidity	% R.H.	4.0	53.28	82.99	99.58
hm0	m	0.0	0.14	1.08	4.32
hmax	m	0.0	0.27	1.60	7.18
thmax	s	0.0	2.76	6.71	22.87
tm01	s	0.0	2.76	4.91	8.65
tm02	s	0.0	2.66	4.57	7.94
tp	s	0.0	2.05	6.56	14.64
Water Temperature	°C	-1.0	7.70	11.15	17.54
Water Level	m LAT	-36.0	0.18	1.20	2.22

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.5 Deployment 5: TNWA - WS190

Table 4.17: Details on Deployment 5

Station	TNWA
Buoy	WS190
Duration	2020-04-11 07:00 - 2020-07-22 17:00
Summary	<p>After refueling WS190 was deployed ca 200 m east of the original TNWA mooring before D03 (WS170) was picked up on 11th April 2020. This was done to ease COVID-19 restricted vessel crew only operations. The designation TNWA was kept. WS190 stayed in position until 22nd July 2020.</p> <p>A new water level sensor was deployed at TNWA together with WS190.</p>
Issues	The LiDAR unit stopped working on 15 th July 2020 due to a laser fault.
Service	<p>Regular maintenance and refuelling after deployment.</p> <p>The LiDAR unit was sent to ZephIR for repairs and a replacement laser was fitted.</p>
Post-processing	<p>LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy).</p> <p>During deployment D05, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3. Beams 1 and 2 were unaffected. For D05, the dataset was cut off from 11 m and below keeping only the top 10 m of unaffected and accepted data.</p> <p>Wave spectra (memspec files) were post-processed in-house.</p> <p>Water level data was reprocessed in-house. A change in min/max water pressure after 2020-06-03 accompanied by sudden increase in sensor tilt was discovered. Data from 2020-06-03 until end of D05 were deemed failed and removed.</p>

Table 4.18: Post-processed system availability as per Section 3.7 in % during TNW Deployment 5.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
89.8	100	51.5	23.5	100	97.8

Table 4.19: Wind speed statistics during TNW Deployment 5: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	5.72	15.2
	3-second gust	4	7.29	20.8
ZephIR LiDAR	10 min mean wind speed	30	7.21	20.5
		40	7.43	20.7
		60	7.82	21.8
		80	8.09	22.3
		100	8.29	22.7
		120	8.46	23.2
		140	8.59	24.0
		160	8.70	25.4
		180	8.80	26.3
		200	8.87	26.9
		250	9.02	27.6

Table 4.20: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 5.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	988.96	1016.77	1037.21
Air Temperature	°C	4.0	4.60	12.18	20.50
Humidity	% R.H.	4.0	50.49	81.07	98.29
hm0	m	0.0	0.14	1.12	4.24
hmax	m	0.0	0.29	1.65	8.10
thmax	s	0.0	2.66	6.62	22.97
tm01	s	0.0	2.66	4.88	8.85
tm02	s	0.0	2.55	4.56	8.04
tp	s	0.0	2.05	6.48	14.44
Water Temperature	°C	-1.0	7.70	12.75	18.71
Water Level	m LAT	-36.0	0.00	1.03	2.27

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.6 Deployment 6: TNWB - WS170

Table 4.21: Details on Deployment 6

Station	TNWB
Buoy	WS170
Duration	2020-06-24 07:00 - 2020-09-14 18:00
Summary	WS170 was redeployed fully functional on 24 th June 2020 and stayed in position until 14 th September 2020.
Issues	Offset in DGPS heading data as a result of damage to the main mast during D03 making DPGS heading unusable. Compass as heading source used instead. The LiDAR unit was unaffected. The mast carrying the Gill wind sensor was permanently turned from neutral causing an offset in the Gill wind direction by a fairly constant 8°.
Service	Regular maintenance and refuelling after deployment. LiDAR met station, GPS antenna on mast 2 were replaced and new mooring with new Thelma sensor was prepared for the next deployment.
Post-processing	The wind direction from the Gill sensor was corrected for the mast turn (-8°). The 180-degree ambiguity was then applied to the LiDAR wind direction with the corrected Gill direction as reference. LiDAR wind speed and direction were post-processed in-house using compass as heading. Wave spectra (memspec files) were post-processed in-house. Water level data was reprocessed in-house.

Table 4.22: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 6.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
99.9	100	100	100	100	98.6

Table 4.23: Wind speed statistics during TNW Deployment 6: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	6.59	15.3
	3-second gust	4	8.52	23.5
ZephIR LiDAR	10 min mean wind speed	30	8.02	20.3
		40	8.22	20.3
		60	8.52	21.9
		80	8.72	22.9
		100	8.87	22.6
		120	9.01	23.0
		140	9.12	24.4
		160	9.21	25.6
		180	9.28	25.7
		200	9.33	26.0
		250	9.44	27.1

Table 4.24: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 6.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	988.87	1014.01	1029.00
Air Temperature	°C	4.0	12.07	17.14	23.51
Humidity	% R.H.	4.0	49.74	79.34	97.11
hm0	m	0.0	0.10	1.29	4.34
hmax	m	0.0	0.27	1.91	6.89
thmax	s	0.0	2.76	6.14	22.97
tm01	s	0.0	2.55	4.77	15.55
tm02	s	0.0	2.45	4.47	12.71
tp	s	0.0	2.05	6.34	19.72
Water Temperature	°C	-1.0	15.43	18.00	21.11
Water Level	m LAT	-36.0	0.23	1.22	2.23

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.7 Deployment 7: TNWA - WS191

Table 4.25: Details on Deployment 7

Station	TNWA
Buoy	WS191
Duration	2020-07-22 18:30 - 2020-12-30 11:30
Summary	After refueling WS191 was deployed in the TNWA position on 22 nd July 2020. WS191 drifted out of position on 30 th December 2020.
Issues	The DGPS system suffered intermittent outages in November 2020 and stopped working on 4 th December 2020. WS191 began to drift during a storm at 11:30 UTC on 30 th of December 2020, and was recovered with heavy damage during an emergency operation 31 st December 2020.
Service	WS191 did not sustain damages in the lead up or during the drifting incident but during the rescue operation and the data is considered valid until the start of the drift. Due to the major damage, WS91 was retired from the project. The TNWA station became unusable for the remainder of the campaign due to parts of the mooring left on the seafloor.
Post-processing	LIDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy) from deployment until 31 st October 2020. For November and December, wind direction was post-processed with compass heading. Wave spectra (memspec files) were post-processed in-house. Water pressure and water level data were deemed failed and removed for the same reasons as D05 (same sensor on same mooring).

Table 4.26: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 7.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
95.2	100	0.0	100	100	98.7

Table 4.27: Wind speed statistics during TNW Deployment 7: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	7.94	21.4
	3-second gust	4	10.36	29.3
ZephIR LiDAR	10 min mean wind speed	30	9.48	28.3
		40	9.66	29.1
		60	9.93	31.2
		80	10.16	31.4
		100	10.32	31.1
		120	10.46	31.7
		140	10.58	32.3
		160	10.70	32.9
		180	10.80	33.1
		200	10.89	34.4
		250	11.07	36.4

Table 4.28: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 7.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	971.48	1011.22	1036.23
Air Temperature	°C	4.0	2.83	13.62	23.40
Humidity	% R.H.	4.0	50.27	81.19	99.15
hm0	m	0.0	0.12	1.63	6.00
hmax	m	0.0	0.31	2.41	9.60
thmax	s	0.0	2.66	6.30	22.77
tm01	s	0.0	2.76	5.10	9.36
tm02	s	0.0	2.66	4.76	8.55
tp	s	0.0	2.05	6.83	19.01
Water Temperature	°C	-1.0	9.18	15.14	21.06
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.8 Deployment 8: TNWB - WS190

Table 4.29: Details on Deployment 8

Station	TNWB
Buoy	WS190
Duration	2020-09-14 22:00 - 2020-10-25 11:20
Summary	WS190 was deployed fully functional on 14 th September 2020. WS190 drifted out of position on 25 th October 2020.
Issues	WS190 began to drift during a storm at 11:20 UTC on 25 th of October 2020, and was recovered with heavy damage during an emergency operation 12 hours later. The mooring including the water level sensor were recovered from TNWB after the drift.
Service	WS190 did not sustain damages in the lead up or during the drifting incident but during the rescue operation and the data is considered valid until the start of the drift. Due to the major damage, WS190 was retired from the project.
Post-processing	LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy). Wave spectra (memspec files) were post-processed in-house. Water level data was reprocessed in-house.

Table 4.30: Post-processed system availability as per Section 3.7 in % during TNW Deployment 8.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
92.7	100	99.8	100	100	98.9

Table 4.31: Wind speed statistics during TNW Deployment 8: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	8.11	15.5
	3-second gust	4	10.59	21.9
ZephIR LiDAR	10 min mean wind speed	30	9.73	20.2
		40	9.89	20.5
		60	10.10	21.8
		80	10.23	22.4
		100	10.34	22.8
		120	10.44	23.7
		140	10.53	24.1
		160	10.62	25.3
		180	10.71	26.1
		200	10.80	26.8
		250	10.98	29.6

Table 4.32: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 8.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	985.35	1009.94	1032.62
Air Temperature	°C	4.0	9.28	14.51	20.88
Humidity	% R.H.	4.0	48.55	76.99	97.75
hm0	m	0.0	0.31	1.69	4.57
hmax	m	0.0	0.40	2.49	8.01
thmax	s	0.0	2.96	6.39	22.05
tm01	s	0.0	3.16	5.24	8.55
tm02	s	0.0	3.06	4.89	7.84
tp	s	0.0	2.66	6.85	16.77
Water Temperature	°C	-1.0	14.08	16.36	19.65
Water Level	m LAT	-36.0	0.00	1.22	2.11

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.9 Deployment 9: TNWB - WS156

Table 4.33: Details on Deployment 9

Station	TNWB
Buoy	WS156
Duration	2020-11-10 07:40 - 2021-01-25 09:10
Summary	WS156, an upgraded single-hull spare buoy without DGPS, was deployed on 10 th November 2020 and stayed in position until 25 th January 2021.
Issues	<p>LiDAR wind direction is only available with compass heading.</p> <p>There was no water level sensor deployed at TNWB.</p> <p>The iridium antenna system failed and no position data are available.</p> <p>The Aquadopp current meter failed on 24th November 2020 and no current data is available from that date.</p>
Service	Regular maintenance and refuelling after deployment. Replacement of faulty sensors.
Post-processing	<p>LiDAR wind speed and direction were post-processed in-house using compass as heading.</p> <p>Wave spectra (memspec files) were post-processed in-house.</p>

Table 4.34: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 9.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
98.9	100	0.0	18.5	100	99.0

Table 4.35: Wind speed statistics during TNW Deployment 9: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	8.70	21.8
	3-second gust	4	11.34	30.4
ZephIR LiDAR	10 min mean wind speed	30	10.12	28.5
		40	10.28	29.1
		60	10.55	30.1
		80	10.75	32.1
		100	10.91	31.6
		120	11.06	32.3
		140	11.19	32.7
		160	11.31	34.2
		180	11.42	33.7
		200	11.51	34.0
		250	11.69	35.6

Table 4.36: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 9.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	971.19	1009.05	1032.03
Air Temperature	°C	4.0	1.22	7.78	14.59
Humidity	% R.H.	4.0	50.27	78.55	100.98
hm0	m	0.0	0.33	1.90	6.00
hmax	m	0.0	0.40	2.78	13.86
thmax	s	0.0	2.66	6.69	20.94
tm01	s	0.0	2.96	5.43	11.70
tm02	s	0.0	2.86	5.04	9.46
tp	s	0.0	2.45	7.46	19.72
Water Temperature	°C	-1.0	7.36	10.15	13.00
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.10 Deployment 10: TNWA-2 - WS199

Table 4.37: Details on Deployment 10

Station	TNWA-2
Buoy	WS199
Duration	2021-01-16 08:40 - 2021-06-20 23:50
Summary	Buoy WS199 was deployed in the TNWA-2 location on 16 th January 2021 and stayed in position until the end of the project.
Issues	No irregularities.
Service	Regular maintenance and refuelling after deployment.
Post-processing	LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy). Wave spectra (memspec files) were post-processed in-house. Water level data was reprocessed in-house.

Table 4.38: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 10.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
96.7	100	95.4	98.9	100	97.7

Table 4.39: Wind speed statistics during TNW Deployment 10: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	6.93	18.9
	3-second gust	4	9.09	26.6
ZephIR LiDAR	10 min mean wind speed	30	8.46	25.8
		40	8.70	26.8
		60	9.13	27.1
		80	9.52	28.1
		100	9.75	29.5
		120	9.94	29.9
		140	10.10	31.1
		160	10.24	30.8
		180	10.34	31.5
		200	10.44	31.8
		250	10.62	33.2

Table 4.40: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 10.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	974.90	1015.45	1042.09
Air Temperature	°C	4.0	-3.29	7.04	19.11
Humidity	% R.H.	4.0	43.61	82.84	99.15
hm0	m	0.0	0.14	1.47	6.22
hmax	m	0.0	0.28	2.18	10.31
thmax	s	0.0	2.66	6.83	22.97
tm01	s	0.0	2.66	5.20	11.90
tm02	s	0.0	2.55	4.82	10.38
tp	s	0.0	2.05	7.20	18.60
Water Temperature	°C	-1.0	3.82	7.96	16.79
Water Level	m LAT	-36.0	0.09	1.52	2.93

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.11 Deployment 11: TNWB - WS187

Table 4.41: Details on Deployment 11

Station	TNWB
Buoy	WS187
Duration	2021-01-25 10:20 - 2021-02-15 19:00
Summary	Buoy WS187 was deployed on 25 th January 2021. WS187 drifted out of position on 15 th February 2021.
Issues	<p>The DGPS system suffered intermittent outages.</p> <p>WS187 started drifting around 19:00 UTC on 15th of February 2021 after likely contact with a vessel and was recovered on 16th of February 2021. Damage was mostly confined to the instruments on the mast top carriers.</p> <p>The TNWB station became unusable for the remainder of the campaign after the floater for the TNWB mooring was not found.</p>
Service	The mast top carriers including sensors were replaced.
Post-processing	<p>LIDAR wind speed and direction were post-processed in-house using compass as heading.</p> <p>Wave spectra (memspec files) were post-processed in-house.</p>

Table 4.42: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 11.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
99.0	100	0.0	100	100	93.2

Table 4.43: Wind speed statistics during TNW Deployment 11: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	9.04	19.0
	3-second gust	4	11.88	26.1
ZephIR LiDAR	10 min mean wind speed	30	10.64	25.3
		40	10.77	25.8
		60	10.96	26.8
		80	11.05	27.4
		100	11.13	27.1
		120	11.19	27.1
		140	11.25	27.5
		160	11.30	27.5
		180	11.33	27.7
		200	11.38	27.9
		250	11.49	29.0

Table 4.44: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 11.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	990.23	1012.80	1042.29
Air Temperature	°C	4.0	-2.11	2.51	6.75
Humidity	% R.H.	4.0	47.16	76.63	100.98
hm0	m	0.0	0.61	1.97	5.89
hmax	m	0.0	0.72	2.90	10.22
thmax	s	0.0	2.96	6.52	15.76
tm01	s	0.0	3.06	5.46	8.14
tm02	s	0.0	2.96	5.09	7.43
tp	s	0.0	3.06	7.11	12.61
Water Temperature	°C	-1.0	4.16	6.17	7.47
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.12 Deployment 12: TNWB-2 - WS187

Table 4.45: Details on Deployment 12

Station	TNWB-2
Buoy	WS187
Duration	2021-03-03 08:10 - 2021-05-03 04:20
Summary	Buoy WS187 was re-deployed fully functional on 25 th January 2021 and stayed in position until 03 rd March 2021.
Issues	<p>There was no new water level sensor deployed at TNWB-2.</p> <p>The LiDAR unit stopped working on 05th April 2021 after loss of communications between the LiDAR unit and geni.</p> <p>The Aquadopp current meter failed on 06th March 2021 and no current data is available from that date.</p>
Service	<p>Regular maintenance and refuelling after deployment.</p> <p>The LiDAR unit was sent to ZX LiDARs for servicing.</p>
Post-processing	<p>LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy).</p> <p>Wave spectra (memspec files) were post-processed in-house.</p>

Table 4.46: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 12.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
57.1	99.9	0.0	4.4	100	97.9

Table 4.47: Wind speed statistics during TNW Deployment 12: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	7.20	19.1
	3-second gust	4	9.29	27.2
ZephIR LiDAR	10 min mean wind speed	30	9.31	24.8
		40	9.57	26.5
		60	10.01	27.5
		80	10.37	28.2
		100	10.65	29.3
		120	10.91	30.3
		140	11.15	28.8
		160	11.35	31.1
		180	11.51	31.0
		200	11.66	32.0
		250	11.97	32.9

Table 4.48: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 12.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	979.88	1019.37	1034.77
Air Temperature	°C	4.0	0.31	6.00	10.67
Humidity	% R.H.	4.0	49.20	81.15	98.72
hm0	m	0.0	0.23	1.70	6.32
hmax	m	0.0	0.31	2.46	9.89
thmax	s	0.0	2.66	6.94	22.97
tm01	s	0.0	2.86	5.33	11.19
tm02	s	0.0	2.66	4.91	9.77
tp	s	0.0	2.15	7.62	18.30
Water Temperature	°C	-1.0	4.35	6.62	10.58
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

4.13 Deployment 13: TNWB-2 - WS181

Table 4.49: Details on Deployment 13

Station	TNWB-2
Buoy	WS181
Duration	2021-05-03 06:10 - 2021-06-20 23:50
Summary	Buoy WS181 was deployed in the TNWB-2 location on 03 rd May 2021 and stayed in position until the end of the project.
Issues	The heighest LiDAR height is 240 m.
Service	Regular maintenance and refuelling after deployment.
Post-processing	LiDAR wind speed and direction were post-processed in-house using DGPS as heading (as on buoy). Wave spectra (memspec files) were post-processed in-house.

Table 4.50: Post-processed system availability as per [Section 3.7](#) in % during TNW Deployment 13.

Wind	Waves	Water Level	Currents	Air Pressure	Temperature
95.3	100	0.0	100	100	97.0

Table 4.51: Wind speed statistics during TNW Deployment 13: 10 min mean and gust from the Gill sensor at 4 m height, 10 min mean speeds at 11 levels from the LiDAR. (Heights referred to the sea surface.)

Instrument	Parameter	Height (m)	Average (m/s)	Maximum (m/s)
Gill Windsonic	10 min mean wind speed	4	5.50	15.9
	3-second gust	4	7.12	22.2
ZephIR LiDAR	10 min mean wind speed	30	6.73	19.5
		40	6.94	20.3
		60	7.33	21.3
		80	7.65	21.4
		100	7.87	21.8
		120	8.02	22.9
		140	8.14	23.3
		160	8.25	23.5
		180	8.33	24.1
		200	8.39	24.1
		240	8.51	24.5

Table 4.52: Statistics of measured values of meteorological data, wave data and sea surface temperature (at 1 m depth) during TNW Deployment 13.

Parameter	Unit	Height (m)	Minimum	Average	Maximum
Air Pressure	hPa	0.5	985.45	1013.07	1030.37
Air Temperature	°C	4.0	3.21	11.20	19.11
Humidity	% R.H.	4.0	57.79	86.99	98.94
hm0	m	0.0	0.14	1.03	4.41
hmax	m	0.0	0.25	1.57	7.98
thmax	s	0.0	2.76	6.88	22.97
tm01	s	0.0	2.66	4.84	7.43
tm02	s	0.0	2.55	4.48	6.82
tp	s	0.0	2.05	6.72	18.60
Water Temperature	°C	-1.0	7.88	11.54	16.83
Water Level	m LAT	-36.0	NaN	NaN	NaN

Gaps in the dataset are listed in [Appendix E: Data gap tables](#).

5. Campaign Summary

The campaign was executed with the intention of having two buoys deployed at all times for redundancy. This was achieved for most of the 24 months except for the following periods, see [Figure 5.1](#):

- (a) 22 January 2020 - 11 April 2020, D03: only 1 buoy deployed at TNWA
- (b) 26 October 2020 - 09 November 2020: after the buoy at TNWB drifted out of position, only 1 buoy active at TNWA due to repair, weather and COVID-10 issues
- (c) 31 December 2020 - 15 January 2021: after the buoy at TNWA drifted out of position, only 1 buoy active at TNWB due to repair, weather and COVID-10 issues
- (d) 16 February 2021 - 02 March 2021: after the buoy at TNWB drifted out of position, only 1 buoy active at TNWA due to repair, weather and COVID-10 issues

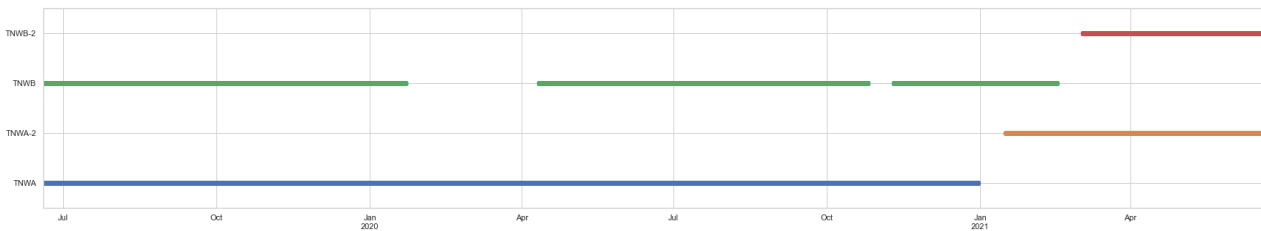


Figure 5.1: Station occupancy during TNW campaign.

In general the Seawatch Wind LiDAR buoys have performed well during the 24-month campaign. Some irregularities have, however, occurred:

- (a) At the end of deployments D01, D02, D03, D05 and D12, the LiDAR units stopped.
- (b) At TNWA, during the first deployment operation, the water level sensor failed and no water level is available for D01 and D03.
- (c) During deployment 03, SWLB WS170 was hit and tilted likely also partially submerged by an extremely large wave during a large storm (*Ciara*). The data indicates that hm_0 and h_{max} peaked outside valid range, air temperature and humidity disappeared and 3 of 4 fuel cells malfunctioned. In addition WS170 suffered damage to the main mast resulting in an offset in the DGPS heading data. The LiDAR unit was unaffected. Wind direction for TNW deployments 3 and 6 was reprocessed with compass heading. In addition, after the storm the mast carrying the Gill wind sensor on WS170 was slightly turned from neutral causing an offset in the Gill wind direction by a fairly constant 8° . The wind direction from the Gill sensor was corrected for the mast turn (-8°). The 180-degree ambiguity was then applied to the LiDAR wind direction with the corrected Gill direction as reference.
- (d) During deployments D02, D04 and D05, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3. Beams 1 and 2 were unaffected. For the D02 data this “step” is much less pronounced and much less visible in the raw data than for D04 and D05.
- (e) For D07, WS191, LiDAR wind direction is given with DGPS heading from deployment start until end of

October 2020. Due to outage of the DGPS system, wind direction for the last 2 months (Nov - Dec 2020) was reprocessed using compass heading.

- (f) During deployment 07, SWLB WS191 moored at TNWA began to drift during a storm at 11:30 UTC on 30th of December 2020, and was recovered with heavy damage during an emergency operation 31st December 2020. As far as can be ascertained, the WS191 buoy did not sustain damages in the lead up or during the drifting incident but during the rescue operation and the data is considered valid until the start of the drift at 2020-12-30 11:30 UTC. WS191 was retired from the project. The TNWA station became unusable for the remainder of the campaign due to parts of the mooring left on the seafloor.
- (g) During deployment 08, SWLB WS190 moored at TNWB began to drift during a storm at 11:20 UTC on 25th of October 2020, and was recovered with heavy damage during an emergency operation 12 hours later. WS190 was retired from the project.
- (h) After the drift of WS190 at the end of D08, the mooring including the water level sensor was recovered. No new water level sensor was deployed and no water level data is available for D09, D11, D12 and D13.
- (i) During deployments D09 and D12 the Aquadopp current meters failed.
- (j) LiDAR wind direction for D09, WS156, uses compass as heading source since WS156 was not equipped with the DGPS system.
- (k) During deployment 11, SWLB WS187 moored at TNWB started drifting around 19:00 UTC on 15th of February 2021 after likely contact with a vessel and was recovered on 16th of February 2021. Damage was mostly confined to the instruments on the mast top carriers. WS187 was repaired and deployed again. The TNWB station became unusable for the remainder of the campaign after the floater for the TNWB mooring was not found.
- (l) LiDAR wind direction for D11, WS187, uses compass as heading source due to outages of the DGPS system during the deployment.
- (m) The highest LiDAR height for D13 is 240 m.

The following large storms passed over the TNW area during this campaign:

Table 5.1: Large storm events during the TNW campaign.

Date	Dep.	Wind speeds	Named storm
26 - 28 July 2019	D01, D02	wind speeds > 20m/s	
08 - 12 August 2019	D01, D02	wind speeds > 25m/s	possibly extratropical remnants of Tropical Storm Ernesto
11 - 12 October 2019	D01, D02	wind speeds > 25m/s	possibly extratropical remnants of Tropical Storm Lorenzo
25 - 26 October 2019	D01, D02	wind speeds > 20m/s	
03 November 2019	D01, D02	wind speeds > 25m/s	possibly remnants of Amélie
05 - 15 December 2019	D01, D02	wind speeds > 25m/s	Atiyah
19 - 21 December 2019	D01, D02	wind speeds > 25m/s	possibly Elsa
30 - 31 January 2020	D03	wind speeds > 20m/s	
09 February 2020	D03	wind speeds > 25m/s	Ciara
15 - 16 February 2020	D03	wind speeds > 25m/s	Dennis
22 - 25 February 2020	D03	wind speeds > 25m/s	possibly Jorge
08 - 15 March 2020	D03	wind speeds > 20m/s	
21 - 22 April 2020	D04, D05	wind speeds > 20m/s	
05 July 2020	D06	wind speeds > 20m/s	
21 - 22 August 2020	D06, D07	wind speeds > 25m/s	Ellen
25 - 26 August 2020	D06, D07	wind speeds > 28m/s	Francis
27 September 2020	D07, D08	wind speeds > 25m/s	Alex
21 - 22 October 2020	D07, D08	wind speeds > 30m/s	Barbara
25 October 2020	D07, D08	wind speeds > 20m/s	
02 November 2020	D07	wind speeds > 25m/s	Aiden
15 - 19 November 2020	D07, D09	wind speeds > 25m/s	Aiden
27 December 2020	D07, D09	wind speeds > 30m/s	Bella
20 - 21 January 2021	D09, D10	wind speeds > 25m/s	Christoph
07 - 08 February 2021	D10, D11	wind speeds > 25m/s	Darcy
24 - 25 February 2021	D10	wind speeds > 20m/s	
10 - 14 March 2021	D10, D12	wind speeds > 20m/s	
04 - 05 May 2021	D10, D13	wind speeds > 20m/s	
21 - 22 May 2021	D10, D13	wind speeds > 20m/s	

Signal and system availability are given for each deployment separately. [Table 5.3](#) gives a breakdown of the number of data gaps associated with post-processing and where LiDAR data is missing at intermediate heights.

The data files presented do not combine data from the buoys/deployments. However, the buoys are deployed for redundancy reasons, so it is possible to increase data availability for a given parameter by combining data from buoys measuring in parallel.

Table 5.2: Post-processed system availability in % during 24-month TNW campaign.

	Wind	Waves	Water Level	Currents	Air Pressure	Temperature
D1	86.0	100	0.0	96.5	100	98.0
D2	77.5	100	71.9	23.5	100	98.9
D3	69.8	99.9	0.0	100	100	61.1
D4	88.8	99.9	98.6	23.5	100	97.2
D5	89.8	100	51.5	23.5	100	97.8
D6	99.9	100	100	100	100	98.6
D7	95.2	100	0.0	100	100	98.7
D8	92.7	100	99.8	100	100	98.9
D9	98.9	100	0.0	18.5	100	99.0
D10	96.7	100	95.4	98.9	100	97.7
D11	99.0	100	0.0	100	100	93.2
D12	57.1	99.9	0.0	4.4	100	97.9
D13	95.3	100	0.0	100	100	97.0

Table 5.3: Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.

Deployment	total # points	Category	Height (m)	% availability
D01	31271	LiDAR failure	all	11.62
		Fog	all	4.24
		Missing met station data	all	0.13
		Post processing filters	30	2.06
			40	2.42
			60	2.21
			80	4.18
			100	4.20
			120	4.78
			140	5.02
			160	5.32
			180	5.66
		200	6.22	
D02	31274	LiDAR failure	all	14.08
		Fog	all	4.35
		Missing met station data	all	0.18
		Post processing filters	30	0.39
			40	1.02
			60	0.59
			80	2.83
			100	2.88
			120	3.39
			140	3.64
			160	3.99
			180	4.38
		200	4.87	
D03	11505	LiDAR failure	all	19.15
		Fog	all	2.14
		Missing met station data	all	1.10
		Post processing filters	30	15.41
			40	15.43
			60	15.52
			80	18.28
			100	18.24
			120	18.14
			140	18.14
			160	18.18
			180	18.35
		200	18.39	
D04	10661	LiDAR failure	all	0.00
		Fog	all	2.55

Table 5.3: Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.

Deployment	total # points	Category	Height (m)	% availability
		Missing met station data	all	0.09
		Post processing filters	30	0.28
			40	0.21
			60	1.66
			80	2.99
			100	3.35
			120	3.61
			140	3.79
			160	3.98
			180	4.18
			200	4.42
D05	14749	LiDAR failure	all	7.45
		Fog	all	2.40
		Missing met station data	all	0.03
		Post processing filters	30	1.44
			40	1.33
			60	2.75
			80	3.98
			100	4.53
			120	4.93
			140	5.11
			160	5.30
			180	5.59
			200	5.75
D06	11875	LiDAR failure	all	0.00
		Fog	all	0.56
		Missing met station data	all	0.01
		Post processing filters	30	0.05
			40	0.03
			60	0.07
			80	0.09
			100	0.10
			120	0.14
			140	0.16
			160	0.24
			180	0.27
			200	0.37
D07	23143	LiDAR failure	all	0.00
		Fog	all	1.69
		Missing met station data	all	0.09
		Post processing filters	30	3.42
			40	3.41

Table 5.3: Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.

Deployment	total # points	Category	Height (m)	% availability
			60	3.47
			80	5.90
			100	5.89
			120	5.97
			140	5.95
			160	6.08
			180	6.14
			200	6.23
D08	5841	LiDAR failure	all	0.00
		Fog	all	0.51
		Missing met station data	all	0.00
		Post processing filters	30	0.00
			40	0.00
			60	0.10
			80	0.21
			100	0.24
			120	0.24
			140	0.24
			160	0.27
			180	0.48
			200	0.63
D09	10954	LiDAR failure	all	0.00
		Fog	all	1.52
		Missing met station data	all	0.00
		Post processing filters	30	0.05
			40	0.05
			60	0.08
			80	1.31
			100	1.57
			120	1.72
			140	1.78
			160	1.84
			180	1.90
			200	1.94
D10	22412	LiDAR failure	all	0.00
		Fog	all	2.89
		Missing met station data	all	0.01
		Post processing filters	30	0.20
			40	0.20
			60	0.91
			80	3.67
			100	4.34

Table 5.3: Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.

Deployment	total # points	Category	Height (m)	% availability
			120	4.70
			140	5.15
			160	5.41
			180	5.62
			200	5.83
D11	3077	LiDAR failure	all	0.00
		Fog	all	1.85
		Missing met station data	all	0.00
		Post processing filters	30	0.58
			40	0.42
			60	0.00
			80	0.65
			100	0.91
			120	1.04
			140	1.01
			160	1.27
			180	1.17
			200	1.36
D12	8762	LiDAR failure	all	46.33
		Fog	all	1.18
		Missing met station data	all	0.00
		Post processing filters	30	0.02
			40	0.00
			60	0.49
			80	1.36
			100	1.64
			120	1.91
			140	2.27
			160	2.47
			180	2.55
			200	2.61
D13	7019	LiDAR failure	all	0.00
		Fog	all	4.52
		Missing met station data	all	0.00
		Post processing filters	30	0.11
			40	0.01
			60	1.38
			80	5.33
			100	6.41
			120	6.95
			140	7.34
			160	7.95

Table 5.3: Availability loss per category: post-processing, partial LiDAR data (likely fog), no met station data.

Deployment	total # points	Category	Height (m)	% availability
			180	8.21
			200	8.49

Table 5.4: Signal availability for wind in % for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
WindDir004m deg	99.4	99.3	99.9	99.9	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
WindDir030m deg	86.6	77.4	68.4	90.2	91.2	99.9	96.6	84.5	99.9	99.8	99.2	53.7	99.9
WindDir040m deg	86.2	76.8	68.4	90.3	91.3	100	96.6	84.5	99.9	99.8	99.4	53.7	100
WindDir060m deg	86.4	77.2	68.3	88.8	90.0	99.9	96.5	84.4	99.9	99.1	99.8	53.4	98.6
WindDir080m deg	84.7	75.3	66.1	87.5	88.9	99.9	94.1	84.3	98.7	96.3	99.1	52.9	94.7
WindDir100m deg	84.7	75.2	66.1	87.1	88.4	99.9	94.1	84.3	98.4	95.7	98.9	52.8	93.6
WindDir120m deg	84.2	74.8	66.2	86.9	88.0	99.9	94.0	84.2	98.3	95.3	98.7	52.6	93.0
WindDir140m deg	83.9	74.6	66.2	86.7	87.8	99.8	94.0	84.3	98.2	94.8	98.8	52.5	92.7
WindDir160m deg	83.7	74.3	66.1	86.5	87.7	99.8	93.9	84.2	98.1	94.6	98.5	52.4	92.1
WindDir180m deg	83.4	73.9	66.0	86.3	87.4	99.7	93.9	84.0	98.1	94.4	98.6	52.3	91.8
WindDir200m deg	82.9	73.5	66.0	86.1	87.2	99.6	93.8	83.9	98.0	94.2	98.4	52.3	91.5
WindDir250m deg	82.0	72.7	65.9	85.6	86.9	99.5	93.7	83.7	97.9	93.5	98.4	51.9	91.0
WindGust004m m/s	99.4	99.3	99.9	99.9	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
WindSpeed004m m/s	99.4	99.3	99.9	99.9	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
WindSpeed030m m/s	86.6	77.4	68.4	90.2	91.2	99.9	96.6	100	100	99.8	99.2	53.7	99.9
WindSpeed040m m/s	86.2	76.8	68.4	90.3	91.3	100	96.6	100	99.9	99.8	99.4	53.7	100
WindSpeed060m m/s	86.4	77.2	68.3	88.8	90.0	99.9	96.5	99.9	99.9	99.1	99.8	53.4	98.6
WindSpeed080m m/s	84.7	75.3	66.1	87.5	88.9	99.9	94.1	99.8	98.7	96.3	99.2	52.9	94.7
WindSpeed100m m/s	84.7	75.2	66.1	87.1	88.4	99.9	94.1	99.8	98.4	95.7	98.9	52.8	93.6
WindSpeed120m m/s	84.2	74.8	66.2	86.9	88.0	99.9	94.0	99.8	98.3	95.3	98.8	52.6	93.0
WindSpeed140m m/s	83.9	74.6	66.2	86.7	87.8	99.8	94.0	99.8	98.2	94.8	98.8	52.5	92.7
WindSpeed160m m/s	83.7	74.3	66.2	86.5	87.7	99.8	93.9	99.7	98.2	94.6	98.5	52.4	92.1
WindSpeed180m m/s	83.4	74.0	66.0	86.3	87.4	99.7	93.9	99.5	98.1	94.4	98.6	52.3	91.8
WindSpeed200m m/s	82.9	73.5	66.0	86.1	87.2	99.6	93.8	99.4	98.1	94.2	98.4	52.3	91.5
WindSpeed250m m/s	82.0	72.7	65.9	85.6	86.9	99.5	93.7	99.1	97.9	93.5	98.4	51.9	91.0*

* 240 m

Table 5.5: Signal availability in % for metocean parameters for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
hm0 m	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
hm0a m	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
hm0b m	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
hmax m	98.2	98.4	99.9	97.0	97.6	97.7	98.8	100.0	100.0	98.3	100.0	99.9	94.2

Table 5.5: Signal availability in % for metocean parameters for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
mDir deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
mDira deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
mDirb deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
sPrtp deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
thhf deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
thtp deg	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
thmax s	98.1	98.2	99.5	95.3	96.1	97.1	98.7	99.9	100.0	97.4	100.0	99.4	92.2
tm01 s	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
tm02 s	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
tm02a s	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
tm02b s	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
tp s	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
tz s	98.2	98.4	99.6	95.4	96.2	97.0	98.7	100.0	100.0	97.2	99.9	99.4	92.0
AirPressure hPa	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AirTemperature C	97.7	97.7	22.1	94.3	95.6	97.2	97.4	97.8	97.9	95.3	86.3	96.1	94.0
AirHumidity %	97.7	97.7	22.1	94.3	95.6	97.2	97.4	97.8	97.8	95.3	84.7	96.1	94.0
WaterTemp001 degC	98.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	100.0
WaterPressure dbar	0.0	93.5	0.0	98.6	51.5	100.0	0.0	99.8	0.0	95.4	0.0	0.0	0.0
BottomTemperature degC	0.0	73.2	0.0	19.0	96.7	93.9	11.3	95.9	0.0	89.0	0.0	0.0	0.0
WaterLevel_LAT m	0.0	71.9	0.0	98.6	51.5	100.0	0.0	99.8	0.0	95.4	0.0	0.0	0.0

Table 5.6: Signal availability in % for currents for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
AqDir003 deg	96.5	100	100	100	100	99.9	100	100	18.5	100	100	4.4	100
AqDir004 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir005 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir006 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir007 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir008 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir009 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir010 deg	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqDir011 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir012 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir013 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100

Table 5.6: Signal availability in % for currents for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
AqDir014 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir015 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir016 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir017 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir018 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir019 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqDir020 deg	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	99.9
AqDir021 deg	96.5	0	100	0	0	100	100	100	18.5	99.9	100	4.4	99.9
AqDir022 deg	96.5	0	100	0	0	100	100	100	18.5	99.8	100	4.4	99.8
AqDir023 deg	96.5	0	100	0	0	100	100	100	18.5	99.6	100	4.4	99.8
AqDir024 deg	96.4	0	100	0	0	100	100	100	18.5	99.1	100	4.4	99.7
AqDir025 deg	96.4	0	100	0	0	100	100	100	18.5	98.6	100	4.4	99.8
AqDir026 deg	96.4	0	100	0	0	100	100	100	18.5	98.1	100	4.4	99.8
AqDir027 deg	96.4	0	100	0	0	100	100	100	18.5	97.5	100	4.4	99.9
AqDir028 deg	96.4	0	100	0	0	100	100	100	18.5	97.1	100	4.4	100
AqDir029 deg	96.3	0	100	0	0	100	100	100	18.5	96.8	100	4.4	100
AqDir030 deg	96.3	0	100	0	0	100	100	100	18.5	96.6	100	4.4	100
AqDir031 deg	96.3	0	100	0	0	100	100	100	18.5	96.4	100	4.4	100
AqDir032 deg	96.4	0	100	0	0	100	100	100	18.5	96.3	100	4.4	100
AqDir033 deg	96.5	0	100	0	0	100	100	100	18.5	96.4	100	4.4	100
AqDir034 deg	96.5	0	100	0	0	100	100	100	18.5	96.3	100	4.4	100
AqDir035 deg	96.5	0	100	0	0	100	100	100	18.5	96.5	100	4.4	100
AqDir036 deg	96.5	0	100	0	0	100	100	100	18.5	98.1	100	4.4	100
AqSpd003 cm/s	96.5	100	100	100	100	99.9	100	100	18.5	100	100	4.4	100
AqSpd004 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd005 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd006 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd007 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd008 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd009 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd010 cm/s	96.5	100	100	100	100	100	100	100	18.5	100	100	4.4	100
AqSpd011 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd012 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd013 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd014 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd015 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd016 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd017 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd018 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd019 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	100
AqSpd020 cm/s	96.5	0	100	0	0	100	100	100	18.5	100	100	4.4	99.9
AqSpd021 cm/s	96.5	0	100	0	0	100	100	100	18.5	99.9	100	4.4	99.9

Table 5.6: Signal availability in % for currents for all deployments at TNW.

	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12	D13
AqSpd022 cm/s	96.5	0	100	0	0	100	100	100	18.5	99.8	100	4.4	99.8
AqSpd023 cm/s	96.5	0	100	0	0	100	100	100	18.5	99.6	100	4.4	99.8
AqSpd024 cm/s	96.4	0	100	0	0	100	100	100	18.5	99.1	100	4.4	99.7
AqSpd025 cm/s	96.4	0	100	0	0	100	100	100	18.5	98.6	100	4.4	99.8
AqSpd026 cm/s	96.4	0	100	0	0	100	100	100	18.5	98.1	100	4.4	99.8
AqSpd027 cm/s	96.4	0	100	0	0	100	100	100	18.5	97.5	100	4.4	99.9
AqSpd028 cm/s	96.4	0	100	0	0	100	100	100	18.5	97.1	100	4.4	100
AqSpd029 cm/s	96.3	0	100	0	0	100	100	100	18.5	96.8	100	4.4	100
AqSpd030 cm/s	96.3	0	100	0	0	100	100	100	18.5	96.6	100	4.4	100
AqSpd031 cm/s	96.3	0	100	0	0	100	100	100	18.5	96.4	100	4.4	100
AqSpd032 cm/s	96.4	0	100	0	0	100	100	100	18.5	96.3	100	4.4	100
AqSpd033 cm/s	96.5	0	100	0	0	100	100	100	18.5	96.4	100	4.4	100
AqSpd034 cm/s	96.5	0	100	0	0	100	100	100	18.5	96.3	100	4.4	100
AqSpd035 cm/s	96.5	0	100	0	0	100	100	100	18.5	96.5	100	4.4	100
AqSpd036 cm/s	96.5	0	100	0	0	100	100	100	18.5	98.1	100	4.4	100

References

- [1] Deltares. Ten noorden van de Waddeneilanden Field Measurement Campaign. Validation Report - June 2019 to June 2021. Tech. Rep. 11203488-002-HYE-0002, Version 3.0, Dec 27, 2021, final, S. Caires, 2021.
- [2] OWA. Carbon Trust Offshore Wind Accelerator roadmap for the commercial acceptance of floating LIDAR technology. Tech. Rep. CTC819 Version 1.0, 21 December 2013, OWA, 2013.
- [3] DNVGL. Assessment of the Fugro/Oceanor Seawatch Floating Lidar Verification at RWE IJmuiden Met Mast. Tech. Rep. GLGH-4257 13 10378-R-0003, Rev. B, issue date 2015-01-30, DNV GL, 2015.
- [4] Natural Power. Floating lidar validation analysis, seawatch wind lidar buoy. Tech. Rep. ref. no. 1124607/D, Natural Power, 2015.
- [5] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy WS190 Pre-Deployment Validation at Frøya, Norway. Tech. Rep. GLGH-4257 13 1012933-R-10, Rev. B, issue date 2019-11-28, DNV GL, 2019.
- [6] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy WS191 Pre-Deployment Validation at Frøya, Norway. Tech. Rep. GLGH-4257 13 10129033-R-11, Rev. B, issue date 2019-11-28, DNV GL, 2019.
- [7] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy Pre-Deployment Validation on Frøya, Norway. Tech. Rep. GLGH-4257 13 10378-R-0004, Rev. A, issue date 2015-03-31, DNV GL, 2015.
- [8] DNVGL. Seawatch Wind LiDAR Buoy WS170 Offshore in situ verification. Quality assessment of the Fugro Seawatch Wind Lidar Buoy WS170. Tech. Rep. GLGH-4257 13 10166838-R-1, Rev. A, issue date 2019-08-29, DNV GL, 2019.
- [9] DNVGL. WS170 Independent performance verification of Seawatch Wind Lidar Buoy at the LEG offshore platform. Tech. Rep. 10298247-R-1, Rev. A, issue date 2021-07-09, DNV GL, 2021.
- [10] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy WS199 Pre-Deployment Validation on Frøya, Norway. Tech. Rep. 10189146-R-3, Rev. A, issue date 2020-02-04, DNV GL, 2020.
- [11] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy WS187 Pre-Deployment Validation on Frøya, Norway. Tech. Rep. 10129033-R-6, Rev. E, issue date 2019-11-28, DNV GL, 2019.
- [12] DNVGL. Assessment of the Fugro OCEANOR Seawatch Wind LiDAR Buoy WS181 Pre-Deployment Validation on Frøya, Norway. Tech. Rep. 10281716-R-2, Rev. A, issue date 2021-02-25, DNV GL, 2021.
- [13] A. Lygre and H. E. Krogstad. Maximum entropy estimation of the directional distribution in ocean wave spectra. *J. Phys. Oceanogr.*, 16, 1986.
- [14] IOC. Manual on Sea-level Measurements and Interpretation, Volume IV : An update to 2006. Tech. Rep. IOC Manuals and Guides No.14, vol. IV ; JCOMM Technical Report No.31; WMO/TD. No. 1339, 78 pp., Paris, France, Intergovernmental Oceanographic Commission of UNESCO, 2006.
- [15] ZXLidars. ZX 843 Service/Repair Report FUGRO 26 August 2020. Tech. Rep. QZ4324, final, 08 Sept 2020, ZXLidars, 2020.

Appendix A: Buoy instrumentation overview

Instrumentation per buoy

A.1 WS190

Table A.1: Instrumentation overview WS190.

SWLB		WS190		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	2.2	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
PMU	436	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Wavesense	366	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
DGPS AsteRx4	181013	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Septentrio	AsteRx: 87	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Compass	1047491	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
LiDAR	ZX843M	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting *
LiDAR firmware	2.2020	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Gill Windsonic	18320036	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Nortek	AQP 9721	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Aquadopp	AQD 15088	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Vaisala PTB	P4120802	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Vaisala HMP	P1730331	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Thelma	562	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Buoy Tracker XEOS	680	2019-06-19 04:50	2020-10-25 11:20	ended due to drifting
Pre-Deployment Reference	[5]			

* Laser failure after 2020-07-13. Laser replaced like-for-like by supplier. Service report available [15].

A.2 WS191

Table A.2: Instrumentation overview WS191.

SWLB		WS191		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	2.2	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
PMU	437	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Wavesense	371	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
DGPS AsteRx4	181014	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Septentrio	AsteRx: 88	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Compass	1047474	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
LiDAR	ZX862M	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
LiDAR firmware	2.2020	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Gill Windsonic	19060137	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Nortek	AQP 9744	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Aquadopp	AQD 14707	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Vaisala PTB	P4120800	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Vaisala HMP	P4050599	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Thelma	926	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Buoy Tracker XEOS	771	2019-06-19 06:00	2020-12-30 11:30	ended due to drifting
Pre-Deployment Reference	[6]			

A.3 WS170

Table A.3: Instrumentation overview WS170.

SWLB		WS170		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	2.1	2019-06-01	2020-09-14 18:00	recovered for service
PMU	393	2019-06-01	2020-09-14 18:00	recovered for service
Wavesense	336	2019-06-01	2020-09-14 18:00	recovered for service
DGPS AsteRx4	181009	2019-06-01	2020-09-14 18:00	recovered for service
Septentrio	S/N 1810012	2019-08-06	2020-09-14 18:00	recovered for service
Compass	1045891	2019-06-01	2020-09-14 18:00	recovered for service
LiDAR	ZX585M	2019-06-01	2020-09-14 18:00	recovered for service
LiDAR firmware	2.2020	2019-06-01	2020-09-14 18:00	recovered for service
Gill Windsonic	18320033	2019-06-01	2020-09-14 18:00	recovered for service
Nortek	AQP 6692	2019-06-01	2019-11-25	Biofouling.
Aquadopp	AQD 13700	2019-06-01	2019-11-25	Biofouling.
	AQP 8644	2019-11-25	2020-09-14 18:00	recovered for service
	AQD 13597	2019-11-25	2020-09-14 18:00	recovered for service
Vaisala PTB	M5220804	2019-06-01	2020-09-14 18:00	recovered for service
Vaisala HMP	P4050602 2018	2019-06-01	2020-09-14 18:00	recovered for service
Thelma	75	2019-09-19	2020-09-14 18:00	recovered for service
Buoy Tracker XEOS	359	2019-06-01	2020-09-14 18:00	recovered for service
Pre-Deployment Reference	[8]			

A.4 WS156

Table A.4: Instrumentation overview WS156.

SWLB		WS156		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	1.1	2020-11-10 07:40	2021-01-25 09:10	recovered for service
PMU	346	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Wavesense	279	2020-11-10 07:40	2021-01-25 09:10	recovered for service
DGPS AsteRx4	-			
Septentrio	-			
Compass	1039696	2020-11-10 07:40	2021-01-25 09:10	recovered for service
LiDAR	ZX501M	2020-11-10 07:40	2021-01-25 09:10	recovered for service
LiDAR firmware	2.2020	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Gill Windsonic	17500028	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Nortek	AQP9721	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Aquadopp	AQD15088	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Vaisala PTB	K2740014	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Vaisala HMP	M1750933	2020-11-10 07:40	2021-01-25 09:10	recovered for service
Thelma	-			
Buoy Tracker	321075	2020-11-10 07:40	2021-01-25 09:10	recovered for service
XEOS				
Pre-Deployment Reference	[6]			

A.5 WS199

Table A.5: Instrumentation overview WS199.

SWLB		WS199		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	2.2	2021-01-16 08:40	2021-06-20 23:50	Campaign end
PMU	454	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Wavesense	387	2021-01-16 08:40	2021-06-20 23:50	Campaign end
DGPS AsteRx4 Septentrio	18493046948	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Compass	1032118	2021-01-16 08:40	2021-06-20 23:50	Campaign end
LiDAR	ZX898M	2021-01-16 08:40	2021-06-20 23:50	Campaign end
LiDAR firmware	2.2020	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Gill Windsonic	20120006	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Nortek	AQP8492	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Aquadopp	AQD13914	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Vaisala PTB	R1820357	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Vaisala HMP	S4310172	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Thelma	1096	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Buoy Tracker XEOS	834	2021-01-16 08:40	2021-06-20 23:50	Campaign end
Pre-Deployment Reference	[10]			

A.6 WS187

Table A.6: Instrumentation overview WS187.

SWLB	WS187	Time installed		Reason
		From	Until	
Design Version	2.2	2021-01-25 10:20	2021-03-05 04:20	recovered for service
PMU	432	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Wavesense	370	2021-01-25 10:20	2021-03-05 04:20	recovered for service
DGPS AsteRx4	SN: 181008	2021-01-25 10:20	2021-02-15 19:00	Both antenna cables replaced in November 2019. Replaced after drifting in February 2020.
Septentrio	SN: 181009	2021-03-03 08:10	2021-03-05 04:20	recovered for service
	AsteRx:3034681	2021-01-25 10:20	2021-02-15 19:00	Replaced after drifting in February 2020.
Compass	AsteRx:3025264	2021-03-03 08:10	2021-03-05 04:20	recovered for service
	1047495	2021-01-25 10:20	2021-03-05 04:20	recovered for service
LiDAR	ZX818M	2021-01-25 10:20	2021-03-05 04:20	LiDAR met station replaced in November 2019.
LiDAR firmware	2.2020	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Gill Windsonic	18320062	2021-01-25 10:20	2021-02-15 19:00	Replaced after drifting in February 2020.
	18320035	2021-03-03 08:10	2021-03-05 04:20	recovered for service
Nortek	AQP 9363	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Aquadopp	AQD 14604	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Vaisala PTB	N5230736	2021-01-25 10:20	2021-02-15 19:00	Replaced after drifting in February 2020.
	N5230739	2021-03-03 08:10	2021-03-05 04:20	recovered for service
Vailsala HMP	P1730335	2021-01-25 10:20	2021-02-15 19:00	Replaced after drifting in February 2020.
	P1730334	2021-03-03 08:10	2021-03-05 04:20	recovered for service
Thelma	921	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Buoy Tracker XEOS	682	2021-01-25 10:20	2021-03-05 04:20	recovered for service
Pre-Deployment Reference	[11]			

A.7 WS181

Table A.7: Instrumentation overview WS181.

SWLB		WS181		
Instrument	Serial Number	Time installed		Reason
		From	Until	
Design Version	2.2	2021-03-05 06:10	2021-06-20 23:50	Campaign end
PMU	423	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Wavesense	354	2021-03-05 06:10	2021-06-20 23:50	Campaign end
DGPS AsteRx4	SN: 181002	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Septentrio	AsteRx:3022725	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Compass	1052560	2021-03-05 06:10	2021-06-20 23:50	Campaign end
LiDAR	ZX759M	2021-03-05 06:10	2021-06-20 23:50	Campaign end
LiDAR firmware	2.2020	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Gill Windsonic	18070007	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Nortek	AQP 9368	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Aquadopp	AQD 14596	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Vaisala PTB	N5230741	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Vailsala HMP	S4310171	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Thelma	1100	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Buoy Tracker XEOS	985	2021-03-05 06:10	2021-06-20 23:50	Campaign end
Pre-Deployment Reference	[12]			

Appendix B: File Contents

B.1 File contents

File: *CurrentDataStat*

Signals: See [Table B.1](#).

The file contains 10-minute average current speed (AqSpd in cm/s) and direction (AqDir in degrees) from the current meter and the lowest signal strength (AqAmp in dB) of the 3 beams for each measurement. All timestamps are set at the end of the averaging period.

File: *CurrentDataStatFlags*

Signals: Filter flags on current data as described in [Table 3.1](#).

File: *CurrentDataStatQualityFlags*

Signals: Data quality flags (integers) on current data as described in [Section 3.6](#).

File: *MetDataStat*

Signals: See [Table B.2](#).

The file contains 10-minute average data from the meteorological and bottom sensors: Air humidity (%), pressure (hPa) and temperature (°C); sea surface temperature (°C), bottom water temperature (°C), water pressure (dbar), water depth (m) and LAT referenced water level (m). All timestamps are set at the end of the averaging period.

File: *MetDataStatFlags*

This file contains the filter flags (see [Table 3.1](#)) for the data in [Table B.1](#).

File: *MetDataStatQualityFlags*

Signals: Data quality flags (integers) on met data as described in [Section 3.6](#).

File: *PosData*

Signals: Geographical Latitude and Longitude in Degrees with 6 decimals plus filter flags.

This file contains hourly values of buoy position according to the GPS sources (Iridium and Septentrio).

File: *StatusData*

Signals: Household parameters.

This file contains hourly values of various buoy household parameters that are used to check buoy functionality:

Fuel cell (1-4) current (A), error (int), fuel remaining (l), operation time (h), voltage (V), battery charge/discharge and voltage (lead and lithium), PMU card number, system up-time plus filter flags.

File: *SupplementaryData*

Signals: Additional parameters.

This file contains additional Thelma data (SNR, ID, modem temperature, tilt, etc.) and LiDAR met station and other LiDAR functionality parameters (rain count, air pressure and temperature, latitude and longitude, battery voltage, mirror temperature, pod humidity) plus filter flags. The data in this file are provided to supplement the dataset.

File: *WaveDataStat*

Signals: See [Table B.3](#). Wave parameters are explained in more detail in [Table -1](#)

The file contains the wave data at 10-min frequency based on 17 min sampling.

The following signals derived from the wave spectra:

hm0 m; hm0a m; hm0b m; hmax m; mdir deg; mdira deg; mdirb deg; sprtp deg; thhf deg; thtp deg; thmax s; tm01 s; tm02 s; tm02a s; tm02b s; tp s; tz s

File: *WaveDataStatFlags*

This file contains the filter flags (see [Table 3.1](#)) for the data in [Table B.1](#) indicating where duplicates or out-of-bounds values were encountered and removed.

File: *WaveDataStatQualityFlags*

Signals: Data quality flags (integers) on wave data as described in [Section 3.6](#).

File: *WindResourceSpeedDirectionStat*

Signals: See [Table B.4](#)

The file contains 10-minute averaged horizontal wind speed and direction, vertical wind speed and minimum and maximum horizontal wind speed in 10-min period. The signals are all timestamped with the end of the averaging period.

File: *WindResourceTIVeerShearInflow*

Signals: See [Table B.5](#)

This file contains the inflow angles in degrees, standard deviations and turbulence intensities using data from the ZephIR unit.

The inflow angles are calculated as the angle between the 10-minute average horizontal and vertical components.

This file also contains wind veer and shear statistics calculated from the already processed LiDAR wind directions and speeds in the *WindResourceSpeedDirectionStat* file.

File: *WindResourceFilterFlags*

This file contains the processing filter flags (see [Table 3.1](#)) for the wind dataset [Table B.1](#) and [Table B.1](#) .

File: *WindResourceStatusFlags*

This file contains LiDAR info and status flags, package count, LiDAR battery voltage, mirror temperature, pod humidity, rain count and heading.

File: *WindResourceQualityFlags*

Signals: Data quality flags (integers) on wind data as described in [Section 3.6](#).

File: *Raw wind data*

Raw 1 Hz LiDAR data directly from the zephir units (unprocessed) is delivered in *.zph* files addition to the processed and quality checked products. The filename convention for this file is: "Wind_*unit*@Y_M_D.ZPH", where *unit* refers to the zephir unit identifier.

In addition 10-minute average files from the ZephIR units are also provided. Note, however, that these are not used in the campaign.

File: *Raw wave data*

Raw wave data is provided in *.chpr* files.

These files contain the Wavesens raw motion compass, heave, pitch and roll data. All angles (compass, pitch and roll) are given in $\sin(\text{angle})$, heave elevations are in m. Sensor sampling rate is at 1 Hz. For each row the timestamp in the first column given represents the start of the sampling of the time series in that row. The index in the parameter name, given by [0],[1],...[1023], is the sample number for the parameter.

File: *Wave spectra*

Wave spectra are provided in *memspec* files.

The file contains the 2-dimensional directional spectral density $S(f, \theta)$ in addition to other spectral parameters. The directional spectrum is estimated from the directional Fourier components using the Burg Maximum Entropy method (MEM).

fmin = 0.01; fmax = 0.50; df = 0.01; nfreq = 50; units=Hz; dirmin=0; dirmax=352.5; ddir=7.5; ndir=50; units=degrees

The MEMspec data file is a sequential text file containing a sequence of records for each recorded wave time series.

File: *Raw current data*

Raw Nortek Aquadopp data are provided either as *.prj* files directly from the current meter or as daily *.txt* files, unpacked by the buoy data logger. In both cases the data are otherwise unprocessed.

B.2 Signal Tables

Table B.1: *CurrentDataStat* signals

Signal name	Unit	Height (m)	Description	Sensor	Proc. Code ¹⁾	Resolution	Configured range
AqDir00xx ²⁾	deg	-3 ...	Current direction	Aquadopp	B	0.176758	-1, 361
AqSpd00xx ²⁾	cm/s	-36 -3 ...	Current speed	Aquadopp	B	0.293945	0, 300
AqAmpxx ²⁾	dB	-3 ...	Signal amplitude	Aquadopp	B	1	0, 128
		-36					

¹⁾ **Proc. code:** Code describing the level of processing applied to data after receipt from the buoy:

B: Data are presented as delivered by the buoy.

D: Data presented are derived from post-processing as described in [Data flow, post-processing and quality control](#).

²⁾ xx = 04, ..., 36 corresponding to measurement height, see [Table 2.1](#)

Table B.2: *MetDataStat* signals

Signal name	Unit	Height (m)	Description	Sensor	Proc. Code ¹⁾	Resolution	Configured range
AirHumidity	%	4	Air humidity	Vaisala HMP155	B	0.107422	0, 110
AirPressure	hPa	0	Air pressure	Vaisala PTB330	B	0.097656	900, 1100
AirTemperature	°C	4	Air temperature	Vaisala HMP155	B	0.0537109	-15, 40
WaterTemp001	°C	-1	Surface water temperature	Aquadopp	B	0.0380859	-4, 35
Bottom Temperature	°C	1 m a.s.f.	Water temperature	Thelma	B	0.00976563	-5, 35
WaterPressure	dbar	Mooring depth	Pressure of water column from mooring point.	Thelma	B	0.0012207	0, 160

¹⁾ **Proc. code:** Code describing the level of processing applied to data after receipt from the buoy:

B: Data are presented as delivered by the buoy.

D: Data presented are derived from post-processing as described in [Data flow, post-processing and quality control](#).

Table B.3: WaveDataStat signals

Signal name	Unit	Height (m)	Description	Sensor	Proc. Code ¹⁾	Resolution	Configured range
hm0	m	0	Estimate of Hs (significant wave height).	Wavesense	B	0.0196289	0, 20
hm0a ³⁾	m	0	Estimate of Hs of swell ³⁾	Wavesense	B	0.0196289	0, 20
hm0b ³⁾	m	0	Estimate of Hs of wind sea ³⁾	Wavesense	B	0.0196289	0, 20
hmax	m	0	Height of the highest wave in the record.	Wavesense	B	0.0293945	0, 30
mdir	deg	0	Mean spectral wave direction.	Wavesense	B	0.707031	0, 360
mdir ³⁾	deg	0	Mean spectral wave direction of swell ³⁾	Wavesense	B	0.707031	0, 360
mdirb ³⁾	deg	0	Mean spectral wave direction of wind sea ³⁾	Wavesense	B	0.707031	0, 360
sprtp	deg	0	Wave spreading at the spectral peak.	Wavesense	B	0.351563	0, 90
thhf	deg	0	High frequency mean wave direction	Wavesense	B	0.707031	0, 360
thmax	s	0	Period of the highest individual wave in the sample.	Wavesense	B	0.101563	0, 25
thtp	deg	0	Estimate of mean wave direction at the spectral peak.	Wavesense	B	0.707031	0, 360
tm01	s	0	Estimate of mean wave period	Wavesense	B	0.101563	0, 25
tm02	s	0	Estimate of mean wave period	Wavesense	B	0.101563	0, 25
tm02a ³⁾	s	0	Estimate of mean wave period of swell ³⁾	Wavesense	B	0.101563	10, 25
tm02b ³⁾	s	0	Estimate of mean wave period of wind sea ³⁾	Wavesense	B	0.101563	2, 10
tp	s	0	Period of the spectral peak	Wavesense	B	0.101563	0, 25
tz	s	0	Average period of individual waves	Wavesense	B	0.101563	0, 25

¹⁾ **Proc. code:** Code describing the level of processing applied to data after receipt from the buoy:

B: Data are presented as delivered by the buoy.

D: Data presented are derived from post-processing as described in [Data flow, post-processing and quality control](#).

³⁾ Wave frequency ranges:

Band "a" (low frequency): 0.04 - 0.10 Hz

Band "b" (high frequency): 0.10 - 0.50 Hz

Table B.4: *WindResourceSpeedDirectionTISat* signals

Signal name	Unit	Height (m)	Description	Sensor	Proc. Code ¹⁾	Resolution	Configured range
WindDir004m	deg	4	Ultrasonic anemometer wind direction	Gill anemometer	B	0.353516	-1, 361
WindSpeed004m	m/s	4	Ultrasonic anemometer wind speed	Gill anemometer	B	0.00744629	-1, 60
WindGust004m	m/s	4	Ultrasonic anemometer wind gust speed	Gill anemometer	B	0.00744629	-1, 60
WindDirxxm ²⁾	deg	30	LiDAR wind direction	ZephIR	B	0.000001	0, 360
		...	10 min average	LiDAR			
		200	using LiDAR data				
WindSpeedxxm ²⁾	m/s	30	LiDAR wind speed	ZephIR	B	0.000001	0, 60
		...	10 min average	LiDAR			
		200	using LiDAR data				
VerticalWindSpeedxxm ²⁾ m/s		30	Vertical LiDAR wind speed	ZephIR	B	0.000001	-15, 15
		...	10 min average	LiDAR			
		200	using LiDAR data				
		250					

¹⁾ **Proc. code:** Code describing the level of processing applied to data after receipt from the buoy:

B: Data calculated onboard the buoy. QA/QC applied as described in [chapter 3](#).

D: Data derived from "B"-data during post-processing as described in [chapter 3](#).

²⁾ **xx** = 30, ..., 200, 250 corresponding to measurement height, see [Table 2.1](#)

Table B.5: *WindResourceInflowAnglesStat* signals

Signal name	Unit	Height (m)	Description	Sensor	Proc. Code ¹⁾	Resolution	Configured range
Standard Deviation xxm ²⁾	m/s	30	Standard Deviation of wind speed in 10 min interval using LiDAR data	ZephIR	B	0.000001	0, 20
		...		LiDAR			
		200					
		250					
TI xxm ²⁾	None	30	Turbulence Intensity ³⁾ using LiDAR data	ZephIR	B	0.000001	0, 20
		...		LiDAR			
		200					
		250					
Inflow angle xxm ²⁾	deg	30	The Inflow Angle (IA) is the angle of the wind vector relative to the horizontal, calculated from 10 minute averages. IA is positive if the wind vector has an upward directed vertical component.	ZephIR	D	0.000001	-40 ,40
		...		LiDAR			
		200					
		250					
Wind Veer [index] ²⁾	deg/m	[index] ²⁾	Difference in direction between adjacent measurement heights per m	ZephIR LiDAR	D	0.000001	-60, 60
Wind Shear [index] ²⁾	[(m/s)/m]	[index] ²⁾	Difference in speed between adjacent measurement heights per m	ZephIR LiDAR	D	0.000001	-20, 20

¹⁾ **Proc. code:** Code describing the level of processing applied to data after receipt from the buoy:

B: Data calculated onboard the buoy. QA/QC applied as described in [chapter 3](#).

D: Data derived from "B"-data during post-processing as described in [chapter 3](#).

²⁾ xx = 30, ..., 200, 250 m index corresponding to measurement height, see [Table 2.1](#)

³⁾ **Turbulence Intensity (TI)** is defined as: $(\sigma/\bar{u})C$ where σ is the standard deviation and \bar{u} is the mean of the wind speed for a 10-min period. $C = 0.95$ is a constant needed to convert the scan-averaged LiDAR measurement to the point-measurements of a cup anemometer. Note that this definition frequently gives relatively high values in situations with low but variable wind speed. Note also that TI is not compensated for the motion of the buoy, which is a source of increased standard deviation in the measurements, and TI is therefore over-estimated compared to what would be obtained from a LiDAR on a fixed platform. (Z300 MODBUS interface, a user's guide, 19th Dec 2013, issue K, ZephIR Lidar)

Fugro Norway

Supply of Meteorological and Oceanographic data at

Ten noorden van de Waddeneilanden



Appendix C: List of Files

TNW

Processed data

D01	TNW_20210909	_Fugro_MetC CurrentDataStat	_F
	TNW_20211112	_Fugro_MetC CurrentDataStatFlags	_F
	TNW_20211112	_Fugro_MetC CurrentDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC MetDataStat	_F
	TNW_20211213	_Fugro_MetC MetDataStatFlags	_F
	TNW_20211213	_Fugro_MetC MetDataQualityFlags	_F
	TNW_20210909	_Fugro_MetC PosData	_F
	TNW_20210909	_Fugro_MetC StatusData	_F
	TNW_20210909	_Fugro_MetC SupplementaryData	_F
	TNW_20210909	_Fugro_MetC WaveDataStat	_F
	TNW_20211213	_Fugro_MetC WaveDataStatFlags	_F
	TNW_20211213	_Fugro_MetC WaveDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceSpeedDirectionStat	_F
	TNW_20210909	_Fugro_MetC WindResourceStatusFlags	_F
	TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceTIVeerShearInflow	_F
	TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
	TNW_20210909	_Fugro_MetC Signal_Availability	_F

D02	TNW_20210909	_Fugro_MetC CurrentDataStat	_F
	TNW_20211213	_Fugro_MetC CurrentDataStatFlags	_F
	TNW_20211213	_Fugro_MetC CurrentDataStatQualityFlags	_F
	TNW_20211112	_Fugro_MetC MetDataStat	_F
	TNW_20211213	_Fugro_MetC MetDataStatFlags	_F
	TNW_20211213	_Fugro_MetC MetDataQualityFlags	_F
	TNW_20210909	_Fugro_MetC PosData	_F
	TNW_20210909	_Fugro_MetC StatusData	_F
	TNW_20210909	_Fugro_MetC SupplementaryData	_F
	TNW_20211112	_Fugro_MetC WaveDataStat	_F
	TNW_20211213	_Fugro_MetC WaveDataStatFlags	_F
	TNW_20211213	_Fugro_MetC WaveDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceSpeedDirectionStat	_F
	TNW_20210909	_Fugro_MetC WindResourceStatusFlags	_F
	TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceTIVeerShearInflow	_F
	TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
	TNW_20211213	_Fugro_MetC Signal_Availability	_F

D03	TNW_20210909	_Fugro_MetC CurrentDataStat	_F
	TNW_20211112	_Fugro_MetC CurrentDataStatFlags	_F
	TNW_20211112	_Fugro_MetC CurrentDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC MetDataStat	_F
	TNW_20211213	_Fugro_MetC MetDataStatFlags	_F
	TNW_20211213	_Fugro_MetC MetDataQualityFlags	_F
	TNW_20210909	_Fugro_MetC PosData	_F
	TNW_20210909	_Fugro_MetC StatusData	_F
	TNW_20210909	_Fugro_MetC SupplementaryData	_F

TNW_20210909	_Fugro_MetC WaveDataStat	_F
TNW_20211213	_Fugro_MetC WaveDataStatFlags	_F
TNW_20211213	_Fugro_MetC WaveDataStatQualityFlags	_F
TNW_20210909	_Fugro_MetC WindResourceSpeedDirectionStat	_F
TNW_20210909	_Fugro_MetC WindResourceStatusFlags	_F
TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
TNW_20210909	_Fugro_MetC WindResourceTIVeerShearInflow	_F
TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
TNW_20210909	_Fugro_MetC Signal_Availability	_F

D04	TNW_20211119	_Fugro_MetC CurrentDataStat	_F
	TNW_20211119	_Fugro_MetC CurrentDataStatFlags	_F
	TNW_20211119	_Fugro_MetC CurrentDataStatQualityFlags	_F
	TNW_20211112	_Fugro_MetC MetDataStat	_F
	TNW_20211213	_Fugro_MetC MetDataStatFlags	_F
	TNW_20211213	_Fugro_MetC MetDataQualityFlags	_F
	TNW_20210909	_Fugro_MetC PosData	_F
	TNW_20210909	_Fugro_MetC StatusData	_F
	TNW_20210909	_Fugro_MetC SupplementaryData	_F
	TNW_20211112	_Fugro_MetC WaveDataStat	_F
	TNW_20211213	_Fugro_MetC WaveDataStatFlags	_F
	TNW_20211213	_Fugro_MetC WaveDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceSpeedDirectionStat	_F
	TNW_20210909	_Fugro_MetC WindResourceStatusFlags	_F
	TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceTIVeerShearInflow	_F
	TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
	TNW_20211119	_Fugro_MetC Signal_Availability	_F

D05	TNW_20211213	_Fugro_MetC CurrentDataStat	_F
	TNW_20211213	_Fugro_MetC CurrentDataStatFlags	_F
	TNW_20211213	_Fugro_MetC CurrentDataStatQualityFlags	_F
	TNW_20211112	_Fugro_MetC MetDataStat	_F
	TNW_20211213	_Fugro_MetC MetDataStatFlags	_F
	TNW_20211213	_Fugro_MetC MetDataQualityFlags	_F
	TNW_20210909	_Fugro_MetC PosData	_F
	TNW_20210909	_Fugro_MetC StatusData	_F
	TNW_20210909	_Fugro_MetC SupplementaryData	_F
	TNW_20210909	_Fugro_MetC WaveDataStat	_F
	TNW_20211213	_Fugro_MetC WaveDataStatFlags	_F
	TNW_20211213	_Fugro_MetC WaveDataStatQualityFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceSpeedDirectionStat	_F
	TNW_20210909	_Fugro_MetC WindResourceStatusFlags	_F
	TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
	TNW_20210909	_Fugro_MetC WindResourceTIVeerShearInflow	_F
	TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
	TNW_20211213	_Fugro_MetC Signal_Availability	_F

D06	TNW_20211112	_Fugro_MetC CurrentDataStat	_F
	TNW_20211112	_Fugro_MetC CurrentDataStatFlags	_F

TNW_20211112	_Fugro_MetC CurrentDataStatQualityFlags	_F
TNW_20211112	_Fugro_MetC MetDataStat	_F
TNW_20211207	_Fugro_MetC MetDataStatFlags	_F
TNW_20211207	_Fugro_MetC MetDataQualityFlags	_F
TNW_20211112	_Fugro_MetC PosData	_F
TNW_20211112	_Fugro_MetC StatusData	_F
TNW_20211112	_Fugro_MetC SupplementaryData	_F
TNW_20211207	_Fugro_MetC WaveDataStat	_F
TNW_20211207	_Fugro_MetC WaveDataStatFlags	_F
TNW_20211207	_Fugro_MetC WaveDataStatQualityFlags	_F
TNW_20211112	_Fugro_MetC WindResourceSpeedDirectionStat	_F
TNW_20211112	_Fugro_MetC WindResourceStatusFlags	_F
TNW_20211112	_Fugro_MetC WindResourceFilterFlags	_F
TNW_20211112	_Fugro_MetC WindResourceTIVeerShearInflow	_F
TNW_20211112	_Fugro_MetC WindResourceQualityFlags	_F
TNW_20211207	_Fugro_MetC Signal_Availability	_F

Wind10_843@Y2019_M11_D26.ZPH.zip
Wind10_843@Y2019_M11_D27.ZPH.zip
Wind10_843@Y2019_M11_D28.ZPH.zip
Wind10_843@Y2019_M11_D29.ZPH.zip
Wind10_843@Y2019_M11_D30.ZPH.zip
Wind10_843@Y2019_M12_D01.ZPH.zip
Wind10_843@Y2019_M12_D02.ZPH.zip
Wind10_843@Y2019_M12_D03.ZPH.zip
Wind10_843@Y2019_M12_D04.ZPH.zip
Wind10_843@Y2019_M12_D05.ZPH.zip
Wind10_843@Y2019_M12_D06.ZPH.zip
Wind10_843@Y2019_M12_D07.ZPH.zip
Wind10_843@Y2019_M12_D08.ZPH.zip
Wind10_843@Y2019_M12_D09.ZPH.zip
Wind10_843@Y2019_M12_D10.ZPH.zip
Wind10_843@Y2019_M12_D11.ZPH.zip
Wind10_843@Y2019_M12_D12.ZPH.zip
Wind10_843@Y2019_M12_D13.ZPH.zip
Wind10_843@Y2019_M12_D14.ZPH.zip
Wind10_843@Y2019_M12_D15.ZPH.zip
Wind10_843@Y2019_M12_D16.ZPH.zip
Wind10_843@Y2019_M12_D17.ZPH.zip
Wind10_843@Y2019_M12_D18.ZPH.zip
Wind10_843@Y2019_M12_D19.ZPH.zip
Wind10_843@Y2019_M12_D20.ZPH.zip
Wind10_843@Y2019_M12_D21.ZPH.zip
Wind10_843@Y2019_M12_D22.ZPH.zip
Wind10_843@Y2019_M12_D23.ZPH.zip
Wind10_843@Y2019_M12_D24.ZPH.zip
Wind10_843@Y2019_M12_D25.ZPH.zip
Wind10_843@Y2019_M12_D26.ZPH.zip
Wind10_843@Y2019_M12_D27.ZPH.zip
Wind10_843@Y2019_M12_D28.ZPH.zip
Wind10_843@Y2019_M12_D29.ZPH.zip
Wind10_843@Y2019_M12_D30.ZPH.zip
Wind10_843@Y2019_M12_D31.ZPH.zip
Wind10_843@Y2020_M01_D01.ZPH.zip
Wind10_843@Y2020_M01_D02.ZPH.zip
Wind10_843@Y2020_M01_D03.ZPH.zip
Wind10_843@Y2020_M01_D04.ZPH.zip
Wind10_843@Y2020_M01_D05.ZPH.zip
Wind10_843@Y2020_M01_D06.ZPH.zip
Wind10_843@Y2020_M01_D07.ZPH.zip
Wind10_843@Y2020_M01_D08.ZPH.zip
Wind10_843@Y2020_M01_D09.ZPH.zip
Wind10_843@Y2020_M01_D10.ZPH.zip

Wind10_862@Y2019_M10_D14.ZPH.zip
Wind10_862@Y2019_M10_D15.ZPH.zip
Wind10_862@Y2019_M10_D16.ZPH.zip
Wind10_862@Y2019_M10_D17.ZPH.zip
Wind10_862@Y2019_M10_D18.ZPH.zip
Wind10_862@Y2019_M10_D19.ZPH.zip
Wind10_862@Y2019_M10_D20.ZPH.zip
Wind10_862@Y2019_M10_D21.ZPH.zip
Wind10_862@Y2019_M10_D22.ZPH.zip
Wind10_862@Y2019_M10_D23.ZPH.zip
Wind10_862@Y2019_M10_D24.ZPH.zip
Wind10_862@Y2019_M10_D25.ZPH.zip
Wind10_862@Y2019_M10_D26.ZPH.zip
Wind10_862@Y2019_M10_D27.ZPH.zip
Wind10_862@Y2019_M10_D28.ZPH.zip
Wind10_862@Y2019_M10_D29.ZPH.zip
Wind10_862@Y2019_M10_D30.ZPH.zip
Wind10_862@Y2019_M10_D31.ZPH.zip
Wind10_862@Y2019_M11_D01.ZPH.zip
Wind10_862@Y2019_M11_D02.ZPH.zip
Wind10_862@Y2019_M11_D03.ZPH.zip
Wind10_862@Y2019_M11_D04.ZPH.zip
Wind10_862@Y2019_M11_D05.ZPH.zip
Wind10_862@Y2019_M11_D06.ZPH.zip
Wind10_862@Y2019_M11_D07.ZPH.zip
Wind10_862@Y2019_M11_D08.ZPH.zip
Wind10_862@Y2019_M11_D09.ZPH.zip
Wind10_862@Y2019_M11_D10.ZPH.zip
Wind10_862@Y2019_M11_D11.ZPH.zip
Wind10_862@Y2019_M11_D12.ZPH.zip
Wind10_862@Y2019_M11_D13.ZPH.zip
Wind10_862@Y2019_M11_D14.ZPH.zip
Wind10_862@Y2019_M11_D15.ZPH.zip
Wind10_862@Y2019_M11_D16.ZPH.zip
Wind10_862@Y2019_M11_D17.ZPH.zip
Wind10_862@Y2019_M11_D18.ZPH.zip
Wind10_862@Y2019_M11_D19.ZPH.zip
Wind10_862@Y2019_M11_D20.ZPH.zip
Wind10_862@Y2019_M11_D21.ZPH.zip
Wind10_862@Y2019_M11_D22.ZPH.zip
Wind10_862@Y2019_M11_D23.ZPH.zip
Wind10_862@Y2019_M11_D24.ZPH.zip
Wind10_862@Y2019_M11_D25.ZPH.zip
Wind10_862@Y2019_M11_D26.ZPH.zip
Wind10_862@Y2019_M11_D27.ZPH.zip
Wind10_862@Y2019_M11_D28.ZPH.zip
Wind10_862@Y2019_M11_D29.ZPH.zip
Wind10_862@Y2019_M11_D30.ZPH.zip
Wind10_862@Y2019_M12_D01.ZPH.zip
Wind10_862@Y2019_M12_D02.ZPH.zip
Wind10_862@Y2019_M12_D03.ZPH.zip
Wind10_862@Y2019_M12_D04.ZPH.zip
Wind10_862@Y2019_M12_D05.ZPH.zip
Wind10_862@Y2019_M12_D06.ZPH.zip
Wind10_862@Y2019_M12_D07.ZPH.zip
Wind10_862@Y2019_M12_D08.ZPH.zip
Wind10_862@Y2019_M12_D09.ZPH.zip
Wind10_862@Y2019_M12_D10.ZPH.zip
Wind10_862@Y2019_M12_D11.ZPH.zip
Wind10_862@Y2019_M12_D12.ZPH.zip
Wind10_862@Y2019_M12_D13.ZPH.zip
Wind10_862@Y2019_M12_D14.ZPH.zip
Wind10_862@Y2019_M12_D15.ZPH.zip
Wind10_862@Y2019_M12_D16.ZPH.zip
Wind10_862@Y2019_M12_D17.ZPH.zip
Wind10_862@Y2019_M12_D18.ZPH.zip
Wind10_862@Y2019_M12_D19.ZPH.zip
Wind10_862@Y2019_M12_D20.ZPH.zip
Wind10_862@Y2019_M12_D21.ZPH.zip
Wind10_862@Y2019_M12_D22.ZPH.zip

Wind10_585@Y2020_M01_D31.ZPH.zip
Wind10_585@Y2020_M02_D01.ZPH.zip
Wind10_585@Y2020_M02_D02.ZPH.zip
Wind10_585@Y2020_M02_D03.ZPH.zip
Wind10_585@Y2020_M02_D04.ZPH.zip
Wind10_585@Y2020_M02_D05.ZPH.zip
Wind10_585@Y2020_M02_D06.ZPH.zip
Wind10_585@Y2020_M02_D07.ZPH.zip
Wind10_585@Y2020_M02_D08.ZPH.zip
Wind10_585@Y2020_M02_D09.ZPH.zip
Wind10_585@Y2020_M02_D10.ZPH.zip
Wind10_585@Y2020_M02_D11.ZPH.zip
Wind10_585@Y2020_M02_D12.ZPH.zip
Wind10_585@Y2020_M02_D13.ZPH.zip
Wind10_585@Y2020_M02_D14.ZPH.zip
Wind10_585@Y2020_M02_D15.ZPH.zip
Wind10_585@Y2020_M02_D16.ZPH.zip
Wind10_585@Y2020_M02_D17.ZPH.zip
Wind10_585@Y2020_M02_D18.ZPH.zip
Wind10_585@Y2020_M02_D19.ZPH.zip
Wind10_585@Y2020_M02_D20.ZPH.zip
Wind10_585@Y2020_M02_D21.ZPH.zip
Wind10_585@Y2020_M02_D22.ZPH.zip
Wind10_585@Y2020_M02_D23.ZPH.zip
Wind10_585@Y2020_M02_D24.ZPH.zip
Wind10_585@Y2020_M02_D25.ZPH.zip
Wind10_585@Y2020_M02_D26.ZPH.zip
Wind10_585@Y2020_M02_D27.ZPH.zip
Wind10_585@Y2020_M02_D28.ZPH.zip
Wind10_585@Y2020_M02_D29.ZPH.zip
Wind10_585@Y2020_M03_D01.ZPH.zip
Wind10_585@Y2020_M03_D02.ZPH.zip
Wind10_585@Y2020_M03_D03.ZPH.zip
Wind10_585@Y2020_M03_D04.ZPH.zip
Wind10_585@Y2020_M03_D05.ZPH.zip
Wind10_585@Y2020_M03_D06.ZPH.zip
Wind10_585@Y2020_M03_D07.ZPH.zip
Wind10_585@Y2020_M03_D08.ZPH.zip
Wind10_585@Y2020_M03_D09.ZPH.zip
Wind10_585@Y2020_M03_D10.ZPH.zip
Wind10_585@Y2020_M03_D11.ZPH.zip
Wind10_585@Y2020_M03_D12.ZPH.zip
Wind10_585@Y2020_M03_D13.ZPH.zip
Wind10_585@Y2020_M03_D14.ZPH.zip
Wind10_585@Y2020_M03_D15.ZPH.zip
Wind10_585@Y2020_M03_D16.ZPH.zip
Wind10_585@Y2020_M03_D17.ZPH.zip
Wind10_585@Y2020_M03_D18.ZPH.zip
Wind10_585@Y2020_M03_D19.ZPH.zip
Wind10_585@Y2020_M03_D20.ZPH.zip
Wind10_585@Y2020_M03_D21.ZPH.zip
Wind10_585@Y2020_M03_D22.ZPH.zip
Wind10_585@Y2020_M03_D23.ZPH.zip
Wind10_585@Y2020_M03_D24.ZPH.zip
Wind10_585@Y2020_M03_D25.ZPH.zip
Wind10_585@Y2020_M03_D26.ZPH.zip

aquadopp-2020-04-05.txt
aquadopp-2020-04-06.txt
aquadopp-2020-04-07.txt
aquadopp-2020-04-08.txt
aquadopp-2020-04-09.txt
aquadopp-2020-04-10.txt
aquadopp-2020-04-11.txt

thelma-2020-04-05.bin
thelma-2020-04-06.bin
thelma-2020-04-07.bin
thelma-2020-04-08.bin
thelma-2020-04-09.bin
thelma-2020-04-10.bin
thelma-2020-04-11.bin

Wind10_862@Y2020_M04_D11.ZPH.zip
Wind10_862@Y2020_M04_D12.ZPH.zip
Wind10_862@Y2020_M04_D13.ZPH.zip
Wind10_862@Y2020_M04_D14.ZPH.zip
Wind10_862@Y2020_M04_D15.ZPH.zip
Wind10_862@Y2020_M04_D16.ZPH.zip
Wind10_862@Y2020_M04_D17.ZPH.zip
Wind10_862@Y2020_M04_D18.ZPH.zip
Wind10_862@Y2020_M04_D19.ZPH.zip
Wind10_862@Y2020_M04_D20.ZPH.zip
Wind10_862@Y2020_M04_D21.ZPH.zip
Wind10_862@Y2020_M04_D22.ZPH.zip
Wind10_862@Y2020_M04_D23.ZPH.zip
Wind10_862@Y2020_M04_D24.ZPH.zip
Wind10_862@Y2020_M04_D25.ZPH.zip
Wind10_862@Y2020_M04_D26.ZPH.zip
Wind10_862@Y2020_M04_D27.ZPH.zip
Wind10_862@Y2020_M04_D28.ZPH.zip
Wind10_862@Y2020_M04_D29.ZPH.zip
Wind10_862@Y2020_M04_D30.ZPH.zip
Wind10_862@Y2020_M05_D01.ZPH.zip
Wind10_862@Y2020_M05_D02.ZPH.zip
Wind10_862@Y2020_M05_D03.ZPH.zip
Wind10_862@Y2020_M05_D04.ZPH.zip
Wind10_862@Y2020_M05_D05.ZPH.zip
Wind10_862@Y2020_M05_D06.ZPH.zip
Wind10_862@Y2020_M05_D07.ZPH.zip
Wind10_862@Y2020_M05_D08.ZPH.zip
Wind10_862@Y2020_M05_D09.ZPH.zip
Wind10_862@Y2020_M05_D10.ZPH.zip
Wind10_862@Y2020_M05_D11.ZPH.zip
Wind10_862@Y2020_M05_D12.ZPH.zip
Wind10_862@Y2020_M05_D13.ZPH.zip
Wind10_862@Y2020_M05_D14.ZPH.zip
Wind10_862@Y2020_M05_D15.ZPH.zip
Wind10_862@Y2020_M05_D16.ZPH.zip
Wind10_862@Y2020_M05_D17.ZPH.zip
Wind10_862@Y2020_M05_D18.ZPH.zip
Wind10_862@Y2020_M05_D19.ZPH.zip
Wind10_862@Y2020_M05_D20.ZPH.zip
Wind10_862@Y2020_M05_D21.ZPH.zip
Wind10_862@Y2020_M05_D22.ZPH.zip
Wind10_862@Y2020_M05_D23.ZPH.zip
Wind10_862@Y2020_M05_D24.ZPH.zip
Wind10_862@Y2020_M05_D25.ZPH.zip
Wind10_862@Y2020_M05_D26.ZPH.zip
Wind10_862@Y2020_M05_D27.ZPH.zip
Wind10_862@Y2020_M05_D28.ZPH.zip
Wind10_862@Y2020_M05_D29.ZPH.zip
Wind10_862@Y2020_M05_D30.ZPH.zip
Wind10_862@Y2020_M05_D31.ZPH.zip
Wind10_862@Y2020_M06_D01.ZPH.zip
Wind10_862@Y2020_M06_D02.ZPH.zip
Wind10_862@Y2020_M06_D03.ZPH.zip
Wind10_862@Y2020_M06_D04.ZPH.zip
Wind10_862@Y2020_M06_D05.ZPH.zip
Wind10_862@Y2020_M06_D06.ZPH.zip
Wind10_862@Y2020_M06_D07.ZPH.zip
Wind10_862@Y2020_M06_D08.ZPH.zip
Wind10_862@Y2020_M06_D09.ZPH.zip
Wind10_862@Y2020_M06_D10.ZPH.zip
Wind10_862@Y2020_M06_D11.ZPH.zip
Wind10_862@Y2020_M06_D12.ZPH.zip
Wind10_862@Y2020_M06_D13.ZPH.zip
Wind10_862@Y2020_M06_D14.ZPH.zip
Wind10_862@Y2020_M06_D15.ZPH.zip
Wind10_862@Y2020_M06_D16.ZPH.zip
Wind10_862@Y2020_M06_D17.ZPH.zip
Wind10_862@Y2020_M06_D18.ZPH.zip
Wind10_862@Y2020_M06_D19.ZPH.zip
Wind10_862@Y2020_M06_D20.ZPH.zip
Wind10_862@Y2020_M06_D21.ZPH.zip
Wind10_862@Y2020_M06_D22.ZPH.zip
Wind10_862@Y2020_M06_D23.ZPH.zip
Wind10_862@Y2020_M06_D24.ZPH.zip

Wind10_843@Y2020_M06_D01.ZPH.zip
Wind10_843@Y2020_M06_D02.ZPH.zip
Wind10_843@Y2020_M06_D03.ZPH.zip
Wind10_843@Y2020_M06_D04.ZPH.zip
Wind10_843@Y2020_M06_D05.ZPH.zip
Wind10_843@Y2020_M06_D06.ZPH.zip
Wind10_843@Y2020_M06_D07.ZPH.zip
Wind10_843@Y2020_M06_D08.ZPH.zip
Wind10_843@Y2020_M06_D09.ZPH.zip
Wind10_843@Y2020_M06_D10.ZPH.zip
Wind10_843@Y2020_M06_D11.ZPH.zip
Wind10_843@Y2020_M06_D12.ZPH.zip
Wind10_843@Y2020_M06_D13.ZPH.zip
Wind10_843@Y2020_M06_D14.ZPH.zip
Wind10_843@Y2020_M06_D15.ZPH.zip
Wind10_843@Y2020_M06_D16.ZPH.zip
Wind10_843@Y2020_M06_D17.ZPH.zip
Wind10_843@Y2020_M06_D18.ZPH.zip
Wind10_843@Y2020_M06_D19.ZPH.zip
Wind10_843@Y2020_M06_D20.ZPH.zip
Wind10_843@Y2020_M06_D21.ZPH.zip
Wind10_843@Y2020_M06_D22.ZPH.zip
Wind10_843@Y2020_M06_D23.ZPH.zip
Wind10_843@Y2020_M06_D24.ZPH.zip
Wind10_843@Y2020_M06_D25.ZPH.zip
Wind10_843@Y2020_M06_D26.ZPH.zip
Wind10_843@Y2020_M06_D27.ZPH.zip
Wind10_843@Y2020_M06_D28.ZPH.zip
Wind10_843@Y2020_M06_D29.ZPH.zip
Wind10_843@Y2020_M06_D30.ZPH.zip
Wind10_843@Y2020_M07_D01.ZPH.zip
Wind10_843@Y2020_M07_D02.ZPH.zip
Wind10_843@Y2020_M07_D03.ZPH.zip
Wind10_843@Y2020_M07_D04.ZPH.zip
Wind10_843@Y2020_M07_D05.ZPH.zip
Wind10_843@Y2020_M07_D06.ZPH.zip
Wind10_843@Y2020_M07_D07.ZPH.zip
Wind10_843@Y2020_M07_D08.ZPH.zip
Wind10_843@Y2020_M07_D09.ZPH.zip
Wind10_843@Y2020_M07_D10.ZPH.zip
Wind10_843@Y2020_M07_D11.ZPH.zip
Wind10_843@Y2020_M07_D12.ZPH.zip
Wind10_843@Y2020_M07_D13.ZPH.zip
Wind10_843@Y2020_M07_D14.ZPH.zip
Wind10_843@Y2020_M07_D15.ZPH.zip
Wind10_843@Y2020_M07_D16.ZPH.zip
Wind10_843@Y2020_M07_D17.ZPH.zip
Wind10_843@Y2020_M07_D18.ZPH.zip
Wind10_843@Y2020_M07_D19.ZPH.zip
Wind10_843@Y2020_M07_D20.ZPH.zip
Wind10_843@Y2020_M07_D21.ZPH.zip
Wind10_843@Y2020_M07_D22.ZPH.zip

Wind_585@Y2020_M09_D06.ZPH.zip aquadopp-2020-09-06.txt
Wind_585@Y2020_M09_D07.ZPH.zip aquadopp-2020-09-07.txt
Wind_585@Y2020_M09_D08.ZPH.zip aquadopp-2020-09-08.txt
Wind_585@Y2020_M09_D09.ZPH.zip aquadopp-2020-09-09.txt
Wind_585@Y2020_M09_D10.ZPH.zip aquadopp-2020-09-10.txt
Wind_585@Y2020_M09_D11.ZPH.zip aquadopp-2020-09-11.txt
Wind_585@Y2020_M09_D12.ZPH.zip aquadopp-2020-09-12.txt
Wind_585@Y2020_M09_D13.ZPH.zip aquadopp-2020-09-13.txt
Wind_585@Y2020_M09_D14.ZPH.zip aquadopp-2020-09-14.txt
Wind10_585@Y2020_M06_D24.ZPH.zip
Wind10_585@Y2020_M06_D25.ZPH.zip
Wind10_585@Y2020_M06_D26.ZPH.zip
Wind10_585@Y2020_M06_D27.ZPH.zip
Wind10_585@Y2020_M06_D28.ZPH.zip
Wind10_585@Y2020_M06_D29.ZPH.zip
Wind10_585@Y2020_M06_D30.ZPH.zip
Wind10_585@Y2020_M07_D01.ZPH.zip
Wind10_585@Y2020_M07_D02.ZPH.zip
Wind10_585@Y2020_M07_D03.ZPH.zip
Wind10_585@Y2020_M07_D04.ZPH.zip
Wind10_585@Y2020_M07_D05.ZPH.zip
Wind10_585@Y2020_M07_D06.ZPH.zip
Wind10_585@Y2020_M07_D07.ZPH.zip
Wind10_585@Y2020_M07_D08.ZPH.zip
Wind10_585@Y2020_M07_D09.ZPH.zip
Wind10_585@Y2020_M07_D10.ZPH.zip
Wind10_585@Y2020_M07_D11.ZPH.zip
Wind10_585@Y2020_M07_D12.ZPH.zip
Wind10_585@Y2020_M07_D13.ZPH.zip
Wind10_585@Y2020_M07_D14.ZPH.zip
Wind10_585@Y2020_M07_D15.ZPH.zip
Wind10_585@Y2020_M07_D16.ZPH.zip
Wind10_585@Y2020_M07_D17.ZPH.zip
Wind10_585@Y2020_M07_D18.ZPH.zip
Wind10_585@Y2020_M07_D19.ZPH.zip
Wind10_585@Y2020_M07_D20.ZPH.zip
Wind10_585@Y2020_M07_D21.ZPH.zip
Wind10_585@Y2020_M07_D22.ZPH.zip
Wind10_585@Y2020_M07_D23.ZPH.zip
Wind10_585@Y2020_M07_D24.ZPH.zip
Wind10_585@Y2020_M07_D25.ZPH.zip
Wind10_585@Y2020_M07_D26.ZPH.zip
Wind10_585@Y2020_M07_D27.ZPH.zip
Wind10_585@Y2020_M07_D28.ZPH.zip
Wind10_585@Y2020_M07_D29.ZPH.zip
Wind10_585@Y2020_M07_D30.ZPH.zip
Wind10_585@Y2020_M07_D31.ZPH.zip
Wind10_585@Y2020_M08_D01.ZPH.zip
Wind10_585@Y2020_M08_D02.ZPH.zip
Wind10_585@Y2020_M08_D03.ZPH.zip
Wind10_585@Y2020_M08_D04.ZPH.zip
Wind10_585@Y2020_M08_D05.ZPH.zip
Wind10_585@Y2020_M08_D06.ZPH.zip
Wind10_585@Y2020_M08_D07.ZPH.zip
Wind10_585@Y2020_M08_D08.ZPH.zip
Wind10_585@Y2020_M08_D09.ZPH.zip
Wind10_585@Y2020_M08_D10.ZPH.zip
Wind10_585@Y2020_M08_D11.ZPH.zip
Wind10_585@Y2020_M08_D12.ZPH.zip
Wind10_585@Y2020_M08_D13.ZPH.zip
Wind10_585@Y2020_M08_D14.ZPH.zip
Wind10_585@Y2020_M08_D15.ZPH.zip
Wind10_585@Y2020_M08_D16.ZPH.zip
Wind10_585@Y2020_M08_D17.ZPH.zip
Wind10_585@Y2020_M08_D18.ZPH.zip
Wind10_585@Y2020_M08_D19.ZPH.zip
Wind10_585@Y2020_M08_D20.ZPH.zip
Wind10_585@Y2020_M08_D21.ZPH.zip
Wind10_585@Y2020_M08_D22.ZPH.zip
Wind10_585@Y2020_M08_D23.ZPH.zip
Wind10_585@Y2020_M08_D24.ZPH.zip
Wind10_585@Y2020_M08_D25.ZPH.zip
Wind10_585@Y2020_M08_D26.ZPH.zip
Wind10_585@Y2020_M08_D27.ZPH.zip
Wind10_585@Y2020_M08_D28.ZPH.zip
Wind10_585@Y2020_M08_D29.ZPH.zip
Wind10_585@Y2020_M08_D30.ZPH.zip
Wind10_585@Y2020_M08_D31.ZPH.zip

thelma-2020-09-05.bin
thelma-2020-09-06.bin
thelma-2020-09-07.bin
thelma-2020-09-08.bin
thelma-2020-09-09.bin
thelma-2020-09-10.bin
thelma-2020-09-11.bin
thelma-2020-09-12.bin
thelma-2020-09-13.bin
thelma-2020-09-14.bin

Wind10_585@Y2020_M09_D01.ZPH.zip
Wind10_585@Y2020_M09_D02.ZPH.zip
Wind10_585@Y2020_M09_D03.ZPH.zip
Wind10_585@Y2020_M09_D04.ZPH.zip
Wind10_585@Y2020_M09_D05.ZPH.zip
Wind10_585@Y2020_M09_D06.ZPH.zip
Wind10_585@Y2020_M09_D07.ZPH.zip
Wind10_585@Y2020_M09_D08.ZPH.zip
Wind10_585@Y2020_M09_D09.ZPH.zip
Wind10_585@Y2020_M09_D10.ZPH.zip
Wind10_585@Y2020_M09_D11.ZPH.zip
Wind10_585@Y2020_M09_D12.ZPH.zip
Wind10_585@Y2020_M09_D13.ZPH.zip
Wind10_585@Y2020_M09_D14.ZPH.zip

Deployment 7

TNWA

WS191

LiDAR

Wind_862@Y2020_M07_D22.ZPH.zip
Wind_862@Y2020_M07_D23.ZPH.zip
Wind_862@Y2020_M07_D24.ZPH.zip
Wind_862@Y2020_M07_D25.ZPH.zip
Wind_862@Y2020_M07_D26.ZPH.zip
Wind_862@Y2020_M07_D27.ZPH.zip
Wind_862@Y2020_M07_D28.ZPH.zip
Wind_862@Y2020_M07_D29.ZPH.zip
Wind_862@Y2020_M07_D30.ZPH.zip
Wind_862@Y2020_M07_D31.ZPH.zip
Wind_862@Y2020_M08_D01.ZPH.zip
Wind_862@Y2020_M08_D02.ZPH.zip
Wind_862@Y2020_M08_D03.ZPH.zip
Wind_862@Y2020_M08_D04.ZPH.zip
Wind_862@Y2020_M08_D05.ZPH.zip
Wind_862@Y2020_M08_D06.ZPH.zip
Wind_862@Y2020_M08_D07.ZPH.zip
Wind_862@Y2020_M08_D08.ZPH.zip
Wind_862@Y2020_M08_D09.ZPH.zip
Wind_862@Y2020_M08_D10.ZPH.zip
Wind_862@Y2020_M08_D11.ZPH.zip
Wind_862@Y2020_M08_D12.ZPH.zip
Wind_862@Y2020_M08_D13.ZPH.zip
Wind_862@Y2020_M08_D14.ZPH.zip
Wind_862@Y2020_M08_D15.ZPH.zip
Wind_862@Y2020_M08_D16.ZPH.zip
Wind_862@Y2020_M08_D17.ZPH.zip
Wind_862@Y2020_M08_D18.ZPH.zip
Wind_862@Y2020_M08_D19.ZPH.zip
Wind_862@Y2020_M08_D20.ZPH.zip
Wind_862@Y2020_M08_D21.ZPH.zip
Wind_862@Y2020_M08_D22.ZPH.zip
Wind_862@Y2020_M08_D23.ZPH.zip
Wind_862@Y2020_M08_D24.ZPH.zip
Wind_862@Y2020_M08_D25.ZPH.zip
Wind_862@Y2020_M08_D26.ZPH.zip
Wind_862@Y2020_M08_D27.ZPH.zip
Wind_862@Y2020_M08_D28.ZPH.zip
Wind_862@Y2020_M08_D29.ZPH.zip
Wind_862@Y2020_M08_D30.ZPH.zip
Wind_862@Y2020_M08_D31.ZPH.zip
Wind_862@Y2020_M09_D01.ZPH.zip
Wind_862@Y2020_M09_D02.ZPH.zip
Wind_862@Y2020_M09_D03.ZPH.zip
Wind_862@Y2020_M09_D04.ZPH.zip
Wind_862@Y2020_M09_D05.ZPH.zip

Aquadopp

aquadopp-2020-07-22.txt
aquadopp-2020-07-23.txt
aquadopp-2020-07-24.txt
aquadopp-2020-07-25.txt
aquadopp-2020-07-26.txt
aquadopp-2020-07-27.txt
aquadopp-2020-07-28.txt
aquadopp-2020-07-29.txt
aquadopp-2020-07-30.txt
aquadopp-2020-07-31.txt
aquadopp-2020-08-01.txt
aquadopp-2020-08-02.txt
aquadopp-2020-08-03.txt
aquadopp-2020-08-04.txt
aquadopp-2020-08-05.txt
aquadopp-2020-08-06.txt
aquadopp-2020-08-07.txt
aquadopp-2020-08-08.txt
aquadopp-2020-08-09.txt
aquadopp-2020-08-10.txt
aquadopp-2020-08-11.txt
aquadopp-2020-08-12.txt
aquadopp-2020-08-13.txt
aquadopp-2020-08-14.txt
aquadopp-2020-08-15.txt
aquadopp-2020-08-16.txt
aquadopp-2020-08-17.txt
aquadopp-2020-08-18.txt
aquadopp-2020-08-19.txt
aquadopp-2020-08-20.txt
aquadopp-2020-08-21.txt
aquadopp-2020-08-22.txt
aquadopp-2020-08-23.txt
aquadopp-2020-08-24.txt
aquadopp-2020-08-25.txt
aquadopp-2020-08-26.txt
aquadopp-2020-08-27.txt
aquadopp-2020-08-28.txt
aquadopp-2020-08-29.txt
aquadopp-2020-08-30.txt
aquadopp-2020-08-31.txt
aquadopp-2020-09-01.txt
aquadopp-2020-09-02.txt
aquadopp-2020-09-03.txt
aquadopp-2020-09-04.txt
aquadopp-2020-09-05.txt

Wind_862@Y2020_M09_D06.ZPH.zip	aquadopp-2020-09-06.txt
Wind_862@Y2020_M09_D07.ZPH.zip	aquadopp-2020-09-07.txt
Wind_862@Y2020_M09_D08.ZPH.zip	aquadopp-2020-09-08.txt
Wind_862@Y2020_M09_D09.ZPH.zip	aquadopp-2020-09-09.txt
Wind_862@Y2020_M09_D10.ZPH.zip	aquadopp-2020-09-10.txt
Wind_862@Y2020_M09_D11.ZPH.zip	aquadopp-2020-09-11.txt
Wind_862@Y2020_M09_D12.ZPH.zip	aquadopp-2020-09-12.txt
Wind_862@Y2020_M09_D13.ZPH.zip	aquadopp-2020-09-13.txt
Wind_862@Y2020_M09_D14.ZPH.zip	aquadopp-2020-09-14.txt
Wind_862@Y2020_M09_D15.ZPH.zip	aquadopp-2020-09-15.txt
Wind_862@Y2020_M09_D16.ZPH.zip	aquadopp-2020-09-16.txt
Wind_862@Y2020_M09_D17.ZPH.zip	aquadopp-2020-09-17.txt
Wind_862@Y2020_M09_D18.ZPH.zip	aquadopp-2020-09-18.txt
Wind_862@Y2020_M09_D19.ZPH.zip	aquadopp-2020-09-19.txt
Wind_862@Y2020_M09_D20.ZPH.zip	aquadopp-2020-09-20.txt
Wind_862@Y2020_M09_D21.ZPH.zip	aquadopp-2020-09-21.txt
Wind_862@Y2020_M09_D22.ZPH.zip	aquadopp-2020-09-22.txt
Wind_862@Y2020_M09_D23.ZPH.zip	aquadopp-2020-09-23.txt
Wind_862@Y2020_M09_D24.ZPH.zip	aquadopp-2020-09-24.txt
Wind_862@Y2020_M09_D25.ZPH.zip	aquadopp-2020-09-25.txt
Wind_862@Y2020_M09_D26.ZPH.zip	aquadopp-2020-09-26.txt
Wind_862@Y2020_M09_D27.ZPH.zip	aquadopp-2020-09-27.txt
Wind_862@Y2020_M09_D28.ZPH.zip	aquadopp-2020-09-28.txt
Wind_862@Y2020_M09_D29.ZPH.zip	aquadopp-2020-09-29.txt
Wind_862@Y2020_M09_D30.ZPH.zip	aquadopp-2020-09-30.txt
Wind_862@Y2020_M10_D01.ZPH.zip	aquadopp-2020-10-01.txt
Wind_862@Y2020_M10_D02.ZPH.zip	aquadopp-2020-10-02.txt
Wind_862@Y2020_M10_D03.ZPH.zip	aquadopp-2020-10-03.txt
Wind_862@Y2020_M10_D04.ZPH.zip	aquadopp-2020-10-04.txt
Wind_862@Y2020_M10_D05.ZPH.zip	aquadopp-2020-10-05.txt
Wind_862@Y2020_M10_D06.ZPH.zip	aquadopp-2020-10-06.txt
Wind_862@Y2020_M10_D07.ZPH.zip	aquadopp-2020-10-07.txt
Wind_862@Y2020_M10_D08.ZPH.zip	aquadopp-2020-10-08.txt
Wind_862@Y2020_M10_D09.ZPH.zip	aquadopp-2020-10-09.txt
Wind_862@Y2020_M10_D10.ZPH.zip	aquadopp-2020-10-10.txt
Wind_862@Y2020_M10_D11.ZPH.zip	aquadopp-2020-10-11.txt
Wind_862@Y2020_M10_D12.ZPH.zip	aquadopp-2020-10-12.txt
Wind_862@Y2020_M10_D13.ZPH.zip	aquadopp-2020-10-13.txt
Wind_862@Y2020_M10_D14.ZPH.zip	aquadopp-2020-10-14.txt
Wind_862@Y2020_M10_D15.ZPH.zip	aquadopp-2020-10-15.txt
Wind_862@Y2020_M10_D16.ZPH.zip	aquadopp-2020-10-16.txt
Wind_862@Y2020_M10_D17.ZPH.zip	aquadopp-2020-10-17.txt
Wind_862@Y2020_M10_D18.ZPH.zip	aquadopp-2020-10-18.txt
Wind_862@Y2020_M10_D19.ZPH.zip	aquadopp-2020-10-19.txt
Wind_862@Y2020_M10_D20.ZPH.zip	aquadopp-2020-10-20.txt
Wind_862@Y2020_M10_D21.ZPH.zip	aquadopp-2020-10-21.txt
Wind_862@Y2020_M10_D22.ZPH.zip	aquadopp-2020-10-22.txt
Wind_862@Y2020_M10_D23.ZPH.zip	aquadopp-2020-10-23.txt
Wind_862@Y2020_M10_D24.ZPH.zip	aquadopp-2020-10-24.txt
Wind_862@Y2020_M10_D25.ZPH.zip	aquadopp-2020-10-25.txt

Wind_862@Y2020_M10_D26.ZPH.zip	aquadopp-2020-10-26.txt
Wind_862@Y2020_M10_D27.ZPH.zip	aquadopp-2020-10-27.txt
Wind_862@Y2020_M10_D28.ZPH.zip	aquadopp-2020-10-28.txt
Wind_862@Y2020_M10_D29.ZPH.zip	aquadopp-2020-10-29.txt
Wind_862@Y2020_M10_D30.ZPH.zip	aquadopp-2020-10-30.txt
Wind_862@Y2020_M10_D31.ZPH.zip	aquadopp-2020-10-31.txt
Wind_862@Y2020_M11_D01.ZPH.zip	aquadopp-2020-11-01.txt
Wind_862@Y2020_M11_D02.ZPH.zip	aquadopp-2020-11-02.txt
Wind_862@Y2020_M11_D03.ZPH.zip	aquadopp-2020-11-03.txt
Wind_862@Y2020_M11_D04.ZPH.zip	aquadopp-2020-11-04.txt
Wind_862@Y2020_M11_D05.ZPH.zip	aquadopp-2020-11-05.txt
Wind_862@Y2020_M11_D06.ZPH.zip	aquadopp-2020-11-06.txt
Wind_862@Y2020_M11_D07.ZPH.zip	aquadopp-2020-11-07.txt
Wind_862@Y2020_M11_D08.ZPH.zip	aquadopp-2020-11-08.txt
Wind_862@Y2020_M11_D09.ZPH.zip	aquadopp-2020-11-09.txt
Wind_862@Y2020_M11_D10.ZPH.zip	aquadopp-2020-11-10.txt
Wind_862@Y2020_M11_D11.ZPH.zip	aquadopp-2020-11-11.txt
Wind_862@Y2020_M11_D12.ZPH.zip	aquadopp-2020-11-12.txt
Wind_862@Y2020_M11_D13.ZPH.zip	aquadopp-2020-11-13.txt
Wind_862@Y2020_M11_D14.ZPH.zip	aquadopp-2020-11-14.txt
Wind_862@Y2020_M11_D15.ZPH.zip	aquadopp-2020-11-15.txt
Wind_862@Y2020_M11_D16.ZPH.zip	aquadopp-2020-11-16.txt
Wind_862@Y2020_M11_D17.ZPH.zip	aquadopp-2020-11-17.txt
Wind_862@Y2020_M11_D18.ZPH.zip	aquadopp-2020-11-18.txt
Wind_862@Y2020_M11_D19.ZPH.zip	aquadopp-2020-11-19.txt
Wind_862@Y2020_M11_D20.ZPH.zip	aquadopp-2020-11-20.txt
Wind_862@Y2020_M11_D21.ZPH.zip	aquadopp-2020-11-21.txt
Wind_862@Y2020_M11_D22.ZPH.zip	aquadopp-2020-11-22.txt
Wind_862@Y2020_M11_D23.ZPH.zip	aquadopp-2020-11-23.txt
Wind_862@Y2020_M11_D24.ZPH.zip	aquadopp-2020-11-24.txt
Wind_862@Y2020_M11_D25.ZPH.zip	aquadopp-2020-11-25.txt
Wind_862@Y2020_M11_D26.ZPH.zip	aquadopp-2020-11-26.txt
Wind_862@Y2020_M11_D27.ZPH.zip	aquadopp-2020-11-27.txt
Wind_862@Y2020_M11_D28.ZPH.zip	aquadopp-2020-11-28.txt
Wind_862@Y2020_M11_D29.ZPH.zip	aquadopp-2020-11-29.txt
Wind_862@Y2020_M11_D30.ZPH.zip	aquadopp-2020-11-30.txt
Wind_862@Y2020_M12_D01.ZPH.zip	aquadopp-2020-12-01.txt
Wind_862@Y2020_M12_D02.ZPH.zip	aquadopp-2020-12-02.txt
Wind_862@Y2020_M12_D03.ZPH.zip	aquadopp-2020-12-03.txt
Wind_862@Y2020_M12_D04.ZPH.zip	aquadopp-2020-12-04.txt
Wind_862@Y2020_M12_D05.ZPH.zip	aquadopp-2020-12-05.txt
Wind_862@Y2020_M12_D06.ZPH.zip	aquadopp-2020-12-06.txt
Wind_862@Y2020_M12_D07.ZPH.zip	aquadopp-2020-12-07.txt
Wind_862@Y2020_M12_D08.ZPH.zip	aquadopp-2020-12-08.txt
Wind_862@Y2020_M12_D09.ZPH.zip	aquadopp-2020-12-09.txt
Wind_862@Y2020_M12_D10.ZPH.zip	aquadopp-2020-12-10.txt
Wind_862@Y2020_M12_D11.ZPH.zip	aquadopp-2020-12-11.txt
Wind_862@Y2020_M12_D12.ZPH.zip	aquadopp-2020-12-12.txt
Wind_862@Y2020_M12_D13.ZPH.zip	aquadopp-2020-12-13.txt
Wind_862@Y2020_M12_D14.ZPH.zip	aquadopp-2020-12-14.txt

Wind_862@Y2020_M12_D15.ZPH.zip aquadopp-2020-12-15.txt
Wind_862@Y2020_M12_D16.ZPH.zip aquadopp-2020-12-16.txt
Wind_862@Y2020_M12_D17.ZPH.zip aquadopp-2020-12-17.txt
Wind_862@Y2020_M12_D18.ZPH.zip aquadopp-2020-12-18.txt
Wind_862@Y2020_M12_D19.ZPH.zip aquadopp-2020-12-19.txt
Wind_862@Y2020_M12_D20.ZPH.zip aquadopp-2020-12-20.txt
Wind_862@Y2020_M12_D21.ZPH.zip aquadopp-2020-12-21.txt
Wind_862@Y2020_M12_D22.ZPH.zip aquadopp-2020-12-22.txt
Wind_862@Y2020_M12_D23.ZPH.zip aquadopp-2020-12-23.txt
Wind_862@Y2020_M12_D24.ZPH.zip aquadopp-2020-12-24.txt
Wind_862@Y2020_M12_D25.ZPH.zip aquadopp-2020-12-25.txt
Wind_862@Y2020_M12_D26.ZPH.zip aquadopp-2020-12-26.txt
Wind_862@Y2020_M12_D27.ZPH.zip aquadopp-2020-12-27.txt
Wind_862@Y2020_M12_D28.ZPH.zip aquadopp-2020-12-28.txt
Wind_862@Y2020_M12_D29.ZPH.zip aquadopp-2020-12-29.txt
Wind_862@Y2020_M12_D30.ZPH.zip aquadopp-2020-12-30.txt
Wind10_862@Y2020_M07_D22.ZPH.zip
Wind10_862@Y2020_M07_D23.ZPH.zip
Wind10_862@Y2020_M07_D24.ZPH.zip
Wind10_862@Y2020_M07_D25.ZPH.zip
Wind10_862@Y2020_M07_D26.ZPH.zip
Wind10_862@Y2020_M07_D27.ZPH.zip
Wind10_862@Y2020_M07_D28.ZPH.zip
Wind10_862@Y2020_M07_D29.ZPH.zip
Wind10_862@Y2020_M07_D30.ZPH.zip
Wind10_862@Y2020_M07_D31.ZPH.zip
Wind10_862@Y2020_M08_D01.ZPH.zip
Wind10_862@Y2020_M08_D02.ZPH.zip
Wind10_862@Y2020_M08_D03.ZPH.zip
Wind10_862@Y2020_M08_D04.ZPH.zip
Wind10_862@Y2020_M08_D05.ZPH.zip
Wind10_862@Y2020_M08_D06.ZPH.zip
Wind10_862@Y2020_M08_D07.ZPH.zip
Wind10_862@Y2020_M08_D08.ZPH.zip
Wind10_862@Y2020_M08_D09.ZPH.zip
Wind10_862@Y2020_M08_D10.ZPH.zip
Wind10_862@Y2020_M08_D11.ZPH.zip
Wind10_862@Y2020_M08_D12.ZPH.zip
Wind10_862@Y2020_M08_D13.ZPH.zip
Wind10_862@Y2020_M08_D14.ZPH.zip
Wind10_862@Y2020_M08_D15.ZPH.zip
Wind10_862@Y2020_M08_D16.ZPH.zip
Wind10_862@Y2020_M08_D17.ZPH.zip
Wind10_862@Y2020_M08_D18.ZPH.zip
Wind10_862@Y2020_M08_D19.ZPH.zip
Wind10_862@Y2020_M08_D20.ZPH.zip
Wind10_862@Y2020_M08_D21.ZPH.zip
Wind10_862@Y2020_M08_D22.ZPH.zip
Wind10_862@Y2020_M08_D23.ZPH.zip
Wind10_862@Y2020_M08_D24.ZPH.zip

Wind10_862@Y2020_M08_D25.ZPH.zip
Wind10_862@Y2020_M08_D26.ZPH.zip
Wind10_862@Y2020_M08_D27.ZPH.zip
Wind10_862@Y2020_M08_D28.ZPH.zip
Wind10_862@Y2020_M08_D29.ZPH.zip
Wind10_862@Y2020_M08_D30.ZPH.zip
Wind10_862@Y2020_M08_D31.ZPH.zip
Wind10_862@Y2020_M09_D01.ZPH.zip
Wind10_862@Y2020_M09_D02.ZPH.zip
Wind10_862@Y2020_M09_D03.ZPH.zip
Wind10_862@Y2020_M09_D04.ZPH.zip
Wind10_862@Y2020_M09_D05.ZPH.zip
Wind10_862@Y2020_M09_D06.ZPH.zip
Wind10_862@Y2020_M09_D07.ZPH.zip
Wind10_862@Y2020_M09_D08.ZPH.zip
Wind10_862@Y2020_M09_D09.ZPH.zip
Wind10_862@Y2020_M09_D10.ZPH.zip
Wind10_862@Y2020_M09_D11.ZPH.zip
Wind10_862@Y2020_M09_D12.ZPH.zip
Wind10_862@Y2020_M09_D13.ZPH.zip
Wind10_862@Y2020_M09_D14.ZPH.zip
Wind10_862@Y2020_M09_D15.ZPH.zip
Wind10_862@Y2020_M09_D16.ZPH.zip
Wind10_862@Y2020_M09_D17.ZPH.zip
Wind10_862@Y2020_M09_D18.ZPH.zip
Wind10_862@Y2020_M09_D19.ZPH.zip
Wind10_862@Y2020_M09_D20.ZPH.zip
Wind10_862@Y2020_M09_D21.ZPH.zip
Wind10_862@Y2020_M09_D22.ZPH.zip
Wind10_862@Y2020_M09_D23.ZPH.zip
Wind10_862@Y2020_M09_D24.ZPH.zip
Wind10_862@Y2020_M09_D25.ZPH.zip
Wind10_862@Y2020_M09_D26.ZPH.zip
Wind10_862@Y2020_M09_D27.ZPH.zip
Wind10_862@Y2020_M09_D28.ZPH.zip
Wind10_862@Y2020_M09_D29.ZPH.zip
Wind10_862@Y2020_M09_D30.ZPH.zip
Wind10_862@Y2020_M10_D01.ZPH.zip
Wind10_862@Y2020_M10_D02.ZPH.zip
Wind10_862@Y2020_M10_D03.ZPH.zip
Wind10_862@Y2020_M10_D04.ZPH.zip
Wind10_862@Y2020_M10_D05.ZPH.zip
Wind10_862@Y2020_M10_D06.ZPH.zip
Wind10_862@Y2020_M10_D07.ZPH.zip
Wind10_862@Y2020_M10_D08.ZPH.zip
Wind10_862@Y2020_M10_D09.ZPH.zip
Wind10_862@Y2020_M10_D10.ZPH.zip
Wind10_862@Y2020_M10_D11.ZPH.zip
Wind10_862@Y2020_M10_D12.ZPH.zip
Wind10_862@Y2020_M10_D13.ZPH.zip

Wind10_862@Y2020_M10_D14.ZPH.zip
Wind10_862@Y2020_M10_D15.ZPH.zip
Wind10_862@Y2020_M10_D16.ZPH.zip
Wind10_862@Y2020_M10_D17.ZPH.zip
Wind10_862@Y2020_M10_D18.ZPH.zip
Wind10_862@Y2020_M10_D19.ZPH.zip
Wind10_862@Y2020_M10_D20.ZPH.zip
Wind10_862@Y2020_M10_D21.ZPH.zip
Wind10_862@Y2020_M10_D22.ZPH.zip
Wind10_862@Y2020_M10_D23.ZPH.zip
Wind10_862@Y2020_M10_D24.ZPH.zip
Wind10_862@Y2020_M10_D25.ZPH.zip
Wind10_862@Y2020_M10_D26.ZPH.zip
Wind10_862@Y2020_M10_D27.ZPH.zip
Wind10_862@Y2020_M10_D28.ZPH.zip
Wind10_862@Y2020_M10_D29.ZPH.zip
Wind10_862@Y2020_M10_D30.ZPH.zip
Wind10_862@Y2020_M10_D31.ZPH.zip
Wind10_862@Y2020_M11_D01.ZPH.zip
Wind10_862@Y2020_M11_D02.ZPH.zip
Wind10_862@Y2020_M11_D03.ZPH.zip
Wind10_862@Y2020_M11_D04.ZPH.zip
Wind10_862@Y2020_M11_D05.ZPH.zip
Wind10_862@Y2020_M11_D06.ZPH.zip
Wind10_862@Y2020_M11_D07.ZPH.zip
Wind10_862@Y2020_M11_D08.ZPH.zip
Wind10_862@Y2020_M11_D09.ZPH.zip
Wind10_862@Y2020_M11_D10.ZPH.zip
Wind10_862@Y2020_M11_D11.ZPH.zip
Wind10_862@Y2020_M11_D12.ZPH.zip
Wind10_862@Y2020_M11_D13.ZPH.zip
Wind10_862@Y2020_M11_D14.ZPH.zip
Wind10_862@Y2020_M11_D15.ZPH.zip
Wind10_862@Y2020_M11_D16.ZPH.zip
Wind10_862@Y2020_M11_D17.ZPH.zip
Wind10_862@Y2020_M11_D18.ZPH.zip
Wind10_862@Y2020_M11_D19.ZPH.zip
Wind10_862@Y2020_M11_D20.ZPH.zip
Wind10_862@Y2020_M11_D21.ZPH.zip
Wind10_862@Y2020_M11_D22.ZPH.zip
Wind10_862@Y2020_M11_D23.ZPH.zip
Wind10_862@Y2020_M11_D24.ZPH.zip
Wind10_862@Y2020_M11_D25.ZPH.zip
Wind10_862@Y2020_M11_D26.ZPH.zip
Wind10_862@Y2020_M11_D27.ZPH.zip
Wind10_862@Y2020_M11_D28.ZPH.zip
Wind10_862@Y2020_M11_D29.ZPH.zip
Wind10_862@Y2020_M11_D30.ZPH.zip
Wind10_862@Y2020_M12_D01.ZPH.zip
Wind10_862@Y2020_M12_D02.ZPH.zip

Wind10_862@Y2020_M12_D03.ZPH.zip
Wind10_862@Y2020_M12_D04.ZPH.zip
Wind10_862@Y2020_M12_D05.ZPH.zip
Wind10_862@Y2020_M12_D06.ZPH.zip
Wind10_862@Y2020_M12_D07.ZPH.zip
Wind10_862@Y2020_M12_D08.ZPH.zip
Wind10_862@Y2020_M12_D09.ZPH.zip
Wind10_862@Y2020_M12_D10.ZPH.zip
Wind10_862@Y2020_M12_D11.ZPH.zip
Wind10_862@Y2020_M12_D12.ZPH.zip
Wind10_862@Y2020_M12_D13.ZPH.zip
Wind10_862@Y2020_M12_D14.ZPH.zip
Wind10_862@Y2020_M12_D15.ZPH.zip
Wind10_862@Y2020_M12_D16.ZPH.zip
Wind10_862@Y2020_M12_D17.ZPH.zip
Wind10_862@Y2020_M12_D18.ZPH.zip
Wind10_862@Y2020_M12_D19.ZPH.zip
Wind10_862@Y2020_M12_D20.ZPH.zip
Wind10_862@Y2020_M12_D21.ZPH.zip
Wind10_862@Y2020_M12_D22.ZPH.zip
Wind10_862@Y2020_M12_D23.ZPH.zip
Wind10_862@Y2020_M12_D24.ZPH.zip
Wind10_862@Y2020_M12_D25.ZPH.zip
Wind10_862@Y2020_M12_D26.ZPH.zip
Wind10_862@Y2020_M12_D27.ZPH.zip
Wind10_862@Y2020_M12_D28.ZPH.zip
Wind10_862@Y2020_M12_D29.ZPH.zip
Wind10_862@Y2020_M12_D30.ZPH.zip

Raw wave

TNW_D7_TNWA_WS191_22-31Jul20_chpr.csv
TNW_D7_TNWA_WS191_01-31Aug20_chpr.csv
TNW_D7_TNWA_WS191_01-30Sep20_chpr.csv
TNW_D7_TNWA_WS191_01-31Oct20_chpr.csv
TNW_D7_TNWA_WS191_01-30Nov20_chpr.csv
TNW_D7_TNWA_WS191_01-30Dec20_chpr.csv
memspec_TNWA_D7_WS191_2020-07-22--2020-07-31.txt
memspec_TNWA_D7_WS191_2020-08-01--2020-08-31.txt
memspec_TNWA_D7_WS191_2020-09-01--2020-09-30.txt
memspec_TNWA_D7_WS191_2020-10-01--2020-10-31.txt
memspec_TNWA_D7_WS191_2020-11-01--2020-11-30.txt
memspec_TNWA_D7_WS191_2020-12-01--2020-12-30.txt

Thelma

D07_TNWA_thelma_tagID.txt
thelma-2020-07-22.bin
thelma-2020-07-23.bin
thelma-2020-07-24.bin
thelma-2020-07-25.bin
thelma-2020-07-26.bin
thelma-2020-07-27.bin
thelma-2020-07-28.bin
thelma-2020-07-29.bin
thelma-2020-07-30.bin
thelma-2020-07-31.bin
thelma-2020-08-01.bin
thelma-2020-08-02.bin
thelma-2020-08-03.bin
thelma-2020-08-04.bin
thelma-2020-08-05.bin
thelma-2020-08-06.bin
thelma-2020-08-07.bin
thelma-2020-08-08.bin
thelma-2020-08-09.bin
thelma-2020-08-10.bin
thelma-2020-08-11.bin
thelma-2020-08-12.bin
thelma-2020-08-13.bin
thelma-2020-08-14.bin
thelma-2020-08-15.bin
thelma-2020-08-16.bin
thelma-2020-08-17.bin
thelma-2020-08-18.bin
thelma-2020-08-19.bin
thelma-2020-08-20.bin
thelma-2020-08-21.bin
thelma-2020-08-22.bin
thelma-2020-08-23.bin
thelma-2020-08-24.bin
thelma-2020-08-25.bin
thelma-2020-08-26.bin
thelma-2020-08-27.bin
thelma-2020-08-28.bin
thelma-2020-08-29.bin
thelma-2020-08-30.bin
thelma-2020-08-31.bin
thelma-2020-09-01.bin
thelma-2020-09-02.bin
thelma-2020-09-03.bin
thelma-2020-09-04.bin

thelma-2020-09-05.bin
thelma-2020-09-06.bin
thelma-2020-09-07.bin
thelma-2020-09-08.bin
thelma-2020-09-09.bin
thelma-2020-09-10.bin
thelma-2020-09-11.bin
thelma-2020-09-12.bin
thelma-2020-09-13.bin
thelma-2020-09-14.bin
thelma-2020-09-15.bin
thelma-2020-09-16.bin
thelma-2020-09-17.bin
thelma-2020-09-18.bin
thelma-2020-09-19.bin
thelma-2020-09-20.bin
thelma-2020-09-21.bin
thelma-2020-09-22.bin
thelma-2020-09-23.bin
thelma-2020-09-24.bin
thelma-2020-09-25.bin
thelma-2020-09-26.bin
thelma-2020-09-27.bin
thelma-2020-09-28.bin
thelma-2020-09-29.bin
thelma-2020-09-30.bin
thelma-2020-10-01.bin
thelma-2020-10-02.bin
thelma-2020-10-03.bin
thelma-2020-10-04.bin
thelma-2020-10-05.bin
thelma-2020-10-06.bin
thelma-2020-10-07.bin
thelma-2020-10-08.bin
thelma-2020-10-09.bin
thelma-2020-10-10.bin
thelma-2020-10-11.bin
thelma-2020-10-12.bin
thelma-2020-10-13.bin
thelma-2020-10-14.bin
thelma-2020-10-15.bin
thelma-2020-10-16.bin
thelma-2020-10-17.bin
thelma-2020-10-18.bin
thelma-2020-10-19.bin
thelma-2020-10-20.bin
thelma-2020-10-21.bin
thelma-2020-10-22.bin
thelma-2020-10-23.bin
thelma-2020-10-24.bin

thelma-2020-10-25.bin
thelma-2020-10-26.bin
thelma-2020-10-27.bin
thelma-2020-10-28.bin
thelma-2020-10-29.bin
thelma-2020-10-30.bin
thelma-2020-10-31.bin
thelma-2020-11-01.bin
thelma-2020-11-02.bin
thelma-2020-11-03.bin
thelma-2020-11-04.bin
thelma-2020-11-05.bin
thelma-2020-11-06.bin
thelma-2020-11-07.bin
thelma-2020-11-08.bin
thelma-2020-11-09.bin
thelma-2020-11-10.bin
thelma-2020-11-11.bin
thelma-2020-11-12.bin
thelma-2020-11-13.bin
thelma-2020-11-14.bin
thelma-2020-11-15.bin
thelma-2020-11-16.bin
thelma-2020-11-17.bin
thelma-2020-11-18.bin
thelma-2020-11-19.bin
thelma-2020-11-20.bin
thelma-2020-11-21.bin
thelma-2020-11-22.bin
thelma-2020-11-23.bin
thelma-2020-11-24.bin
thelma-2020-11-25.bin
thelma-2020-11-26.bin
thelma-2020-11-27.bin
thelma-2020-11-28.bin
thelma-2020-11-29.bin
thelma-2020-11-30.bin
thelma-2020-12-01.bin
thelma-2020-12-02.bin
thelma-2020-12-03.bin
thelma-2020-12-04.bin
thelma-2020-12-05.bin
thelma-2020-12-06.bin
thelma-2020-12-07.bin
thelma-2020-12-08.bin
thelma-2020-12-09.bin
thelma-2020-12-10.bin
thelma-2020-12-11.bin
thelma-2020-12-12.bin
thelma-2020-12-13.bin

thelma-2020-12-14.bin
thelma-2020-12-15.bin
thelma-2020-12-16.bin
thelma-2020-12-17.bin
thelma-2020-12-18.bin
thelma-2020-12-19.bin
thelma-2020-12-20.bin
thelma-2020-12-21.bin
thelma-2020-12-22.bin
thelma-2020-12-23.bin
thelma-2020-12-24.bin
thelma-2020-12-25.bin
thelma-2020-12-26.bin
thelma-2020-12-27.bin
thelma-2020-12-28.bin
thelma-2020-12-29.bin
thelma-2020-12-30.bin

Deployment 8

TNWB

WS190

LiDAR

Wind_843@Y2020_M09_D14.ZPH.zip
Wind_843@Y2020_M09_D15.ZPH.zip
Wind_843@Y2020_M09_D16.ZPH.zip
Wind_843@Y2020_M09_D17.ZPH.zip
Wind_843@Y2020_M09_D18.ZPH.zip
Wind_843@Y2020_M09_D19.ZPH.zip
Wind_843@Y2020_M09_D20.ZPH.zip
Wind_843@Y2020_M09_D21.ZPH.zip
Wind_843@Y2020_M09_D22.ZPH.zip
Wind_843@Y2020_M09_D23.ZPH.zip
Wind_843@Y2020_M09_D24.ZPH.zip
Wind_843@Y2020_M09_D25.ZPH.zip
Wind_843@Y2020_M09_D26.ZPH.zip
Wind_843@Y2020_M09_D27.ZPH.zip
Wind_843@Y2020_M09_D28.ZPH.zip
Wind_843@Y2020_M09_D29.ZPH.zip
Wind_843@Y2020_M09_D30.ZPH.zip
Wind_843@Y2020_M10_D01.ZPH.zip
Wind_843@Y2020_M10_D02.ZPH.zip
Wind_843@Y2020_M10_D03.ZPH.zip
Wind_843@Y2020_M10_D04.ZPH.zip
Wind_843@Y2020_M10_D05.ZPH.zip
Wind_843@Y2020_M10_D06.ZPH.zip
Wind_843@Y2020_M10_D07.ZPH.zip
Wind_843@Y2020_M10_D08.ZPH.zip
Wind_843@Y2020_M10_D09.ZPH.zip
Wind_843@Y2020_M10_D10.ZPH.zip
Wind_843@Y2020_M10_D11.ZPH.zip
Wind_843@Y2020_M10_D12.ZPH.zip
Wind_843@Y2020_M10_D13.ZPH.zip
Wind_843@Y2020_M10_D14.ZPH.zip
Wind_843@Y2020_M10_D15.ZPH.zip
Wind_843@Y2020_M10_D16.ZPH.zip
Wind_843@Y2020_M10_D17.ZPH.zip
Wind_843@Y2020_M10_D18.ZPH.zip
Wind_843@Y2020_M10_D19.ZPH.zip
Wind_843@Y2020_M10_D20.ZPH.zip
Wind_843@Y2020_M10_D21.ZPH.zip
Wind_843@Y2020_M10_D22.ZPH.zip
Wind_843@Y2020_M10_D23.ZPH.zip
Wind_843@Y2020_M10_D24.ZPH.zip
Wind_843@Y2020_M10_D25.ZPH.zip
Wind10_843@Y2020_M09_D14.ZPH.zip
Wind10_843@Y2020_M09_D15.ZPH.zip
Wind10_843@Y2020_M09_D16.ZPH.zip
Wind10_843@Y2020_M09_D17.ZPH.zip

Aquadopp

aquadopp-2020-09-14.txt
aquadopp-2020-09-15.txt
aquadopp-2020-09-16.txt
aquadopp-2020-09-17.txt
aquadopp-2020-09-18.txt
aquadopp-2020-09-19.txt
aquadopp-2020-09-20.txt
aquadopp-2020-09-21.txt
aquadopp-2020-09-22.txt
aquadopp-2020-09-23.txt
aquadopp-2020-09-24.txt
aquadopp-2020-09-25.txt
aquadopp-2020-09-26.txt
aquadopp-2020-09-27.txt
aquadopp-2020-09-28.txt
aquadopp-2020-09-29.txt
aquadopp-2020-09-30.txt
aquadopp-2020-10-01.txt
aquadopp-2020-10-02.txt
aquadopp-2020-10-03.txt
aquadopp-2020-10-04.txt
aquadopp-2020-10-05.txt
aquadopp-2020-10-06.txt
aquadopp-2020-10-07.txt
aquadopp-2020-10-08.txt
aquadopp-2020-10-09.txt
aquadopp-2020-10-10.txt
aquadopp-2020-10-11.txt
aquadopp-2020-10-12.txt
aquadopp-2020-10-13.txt
aquadopp-2020-10-14.txt
aquadopp-2020-10-15.txt
aquadopp-2020-10-16.txt
aquadopp-2020-10-17.txt
aquadopp-2020-10-18.txt
aquadopp-2020-10-19.txt
aquadopp-2020-10-20.txt
aquadopp-2020-10-21.txt
aquadopp-2020-10-22.txt
aquadopp-2020-10-23.txt
aquadopp-2020-10-24.txt
aquadopp-2020-10-25.txt

Wind10_843@Y2020_M09_D18.ZPH.zip
Wind10_843@Y2020_M09_D19.ZPH.zip
Wind10_843@Y2020_M09_D20.ZPH.zip
Wind10_843@Y2020_M09_D21.ZPH.zip
Wind10_843@Y2020_M09_D22.ZPH.zip
Wind10_843@Y2020_M09_D23.ZPH.zip
Wind10_843@Y2020_M09_D24.ZPH.zip
Wind10_843@Y2020_M09_D25.ZPH.zip
Wind10_843@Y2020_M09_D26.ZPH.zip
Wind10_843@Y2020_M09_D27.ZPH.zip
Wind10_843@Y2020_M09_D28.ZPH.zip
Wind10_843@Y2020_M09_D29.ZPH.zip
Wind10_843@Y2020_M09_D30.ZPH.zip
Wind10_843@Y2020_M10_D01.ZPH.zip
Wind10_843@Y2020_M10_D02.ZPH.zip
Wind10_843@Y2020_M10_D03.ZPH.zip
Wind10_843@Y2020_M10_D04.ZPH.zip
Wind10_843@Y2020_M10_D05.ZPH.zip
Wind10_843@Y2020_M10_D06.ZPH.zip
Wind10_843@Y2020_M10_D07.ZPH.zip
Wind10_843@Y2020_M10_D08.ZPH.zip
Wind10_843@Y2020_M10_D09.ZPH.zip
Wind10_843@Y2020_M10_D10.ZPH.zip
Wind10_843@Y2020_M10_D11.ZPH.zip
Wind10_843@Y2020_M10_D12.ZPH.zip
Wind10_843@Y2020_M10_D13.ZPH.zip
Wind10_843@Y2020_M10_D14.ZPH.zip
Wind10_843@Y2020_M10_D15.ZPH.zip
Wind10_843@Y2020_M10_D16.ZPH.zip
Wind10_843@Y2020_M10_D17.ZPH.zip
Wind10_843@Y2020_M10_D18.ZPH.zip
Wind10_843@Y2020_M10_D19.ZPH.zip
Wind10_843@Y2020_M10_D20.ZPH.zip
Wind10_843@Y2020_M10_D21.ZPH.zip
Wind10_843@Y2020_M10_D22.ZPH.zip
Wind10_843@Y2020_M10_D23.ZPH.zip
Wind10_843@Y2020_M10_D24.ZPH.zip
Wind10_843@Y2020_M10_D25.ZPH.zip

Raw wave

TNW_D8_TNWB_WS190_14-30Sep20_chpr.csv
TNW_D8_TNWB_WS190_01-25Oct20_chpr.csv
memspec_TNWB_D8_WS190_2020-09-14--2020-09-30.txt
memspec_TNWB_D8_WS190_2020-10-01--2020-10-25.txt

Thelma

D08_TNWB_thelma_tagID.txt
thelma-2020-09-14.bin
thelma-2020-09-15.bin
thelma-2020-09-16.bin
thelma-2020-09-17.bin
thelma-2020-09-18.bin
thelma-2020-09-19.bin
thelma-2020-09-20.bin
thelma-2020-09-21.bin
thelma-2020-09-22.bin
thelma-2020-09-23.bin
thelma-2020-09-24.bin
thelma-2020-09-25.bin
thelma-2020-09-26.bin
thelma-2020-09-27.bin
thelma-2020-09-28.bin
thelma-2020-09-29.bin
thelma-2020-09-30.bin
thelma-2020-10-01.bin
thelma-2020-10-02.bin
thelma-2020-10-03.bin
thelma-2020-10-04.bin
thelma-2020-10-05.bin
thelma-2020-10-06.bin
thelma-2020-10-07.bin
thelma-2020-10-08.bin
thelma-2020-10-09.bin
thelma-2020-10-10.bin
thelma-2020-10-11.bin
thelma-2020-10-12.bin
thelma-2020-10-13.bin
thelma-2020-10-14.bin
thelma-2020-10-15.bin
thelma-2020-10-16.bin
thelma-2020-10-17.bin
thelma-2020-10-18.bin
thelma-2020-10-19.bin
thelma-2020-10-20.bin
thelma-2020-10-21.bin
thelma-2020-10-22.bin
thelma-2020-10-23.bin
thelma-2020-10-24.bin
thelma-2020-10-25.bin

Deployment 9

TNWB

WS156

LiDAR

Wind_501@Y2020_M11_D10.ZPH.zip
Wind_501@Y2020_M11_D11.ZPH.zip
Wind_501@Y2020_M11_D12.ZPH.zip
Wind_501@Y2020_M11_D13.ZPH.zip
Wind_501@Y2020_M11_D14.ZPH.zip
Wind_501@Y2020_M11_D15.ZPH.zip
Wind_501@Y2020_M11_D16.ZPH.zip
Wind_501@Y2020_M11_D17.ZPH.zip
Wind_501@Y2020_M11_D18.ZPH.zip
Wind_501@Y2020_M11_D19.ZPH.zip
Wind_501@Y2020_M11_D20.ZPH.zip
Wind_501@Y2020_M11_D21.ZPH.zip
Wind_501@Y2020_M11_D22.ZPH.zip
Wind_501@Y2020_M11_D23.ZPH.zip
Wind_501@Y2020_M11_D24.ZPH.zip
Wind_501@Y2020_M11_D25.ZPH.zip
Wind_501@Y2020_M11_D26.ZPH.zip
Wind_501@Y2020_M11_D27.ZPH.zip
Wind_501@Y2020_M11_D28.ZPH.zip
Wind_501@Y2020_M11_D29.ZPH.zip
Wind_501@Y2020_M11_D30.ZPH.zip
Wind_501@Y2020_M12_D01.ZPH.zip
Wind_501@Y2020_M12_D02.ZPH.zip
Wind_501@Y2020_M12_D03.ZPH.zip
Wind_501@Y2020_M12_D04.ZPH.zip
Wind_501@Y2020_M12_D05.ZPH.zip
Wind_501@Y2020_M12_D06.ZPH.zip
Wind_501@Y2020_M12_D07.ZPH.zip
Wind_501@Y2020_M12_D08.ZPH.zip
Wind_501@Y2020_M12_D09.ZPH.zip
Wind_501@Y2020_M12_D10.ZPH.zip
Wind_501@Y2020_M12_D11.ZPH.zip
Wind_501@Y2020_M12_D12.ZPH.zip
Wind_501@Y2020_M12_D13.ZPH.zip
Wind_501@Y2020_M12_D14.ZPH.zip
Wind_501@Y2020_M12_D15.ZPH.zip
Wind_501@Y2020_M12_D16.ZPH.zip
Wind_501@Y2020_M12_D17.ZPH.zip
Wind_501@Y2020_M12_D18.ZPH.zip
Wind_501@Y2020_M12_D19.ZPH.zip
Wind_501@Y2020_M12_D20.ZPH.zip
Wind_501@Y2020_M12_D21.ZPH.zip
Wind_501@Y2020_M12_D22.ZPH.zip
Wind_501@Y2020_M12_D23.ZPH.zip
Wind_501@Y2020_M12_D24.ZPH.zip
Wind_501@Y2020_M12_D25.ZPH.zip

Aquadopp

aquadopp-2020-11-10.txt
aquadopp-2020-11-11.txt
aquadopp-2020-11-12.txt
aquadopp-2020-11-13.txt
aquadopp-2020-11-14.txt
aquadopp-2020-11-15.txt
aquadopp-2020-11-16.txt
aquadopp-2020-11-17.txt
aquadopp-2020-11-18.txt
aquadopp-2020-11-19.txt
aquadopp-2020-11-20.txt
aquadopp-2020-11-21.txt
aquadopp-2020-11-22.txt
aquadopp-2020-11-23.txt
aquadopp-2020-11-24.txt

Wind_501@Y2020_M12_D26.ZPH.zip
Wind_501@Y2020_M12_D27.ZPH.zip
Wind_501@Y2020_M12_D28.ZPH.zip
Wind_501@Y2020_M12_D29.ZPH.zip
Wind_501@Y2020_M12_D30.ZPH.zip
Wind_501@Y2020_M12_D31.ZPH.zip
Wind_501@Y2021_M01_D01.ZPH.zip
Wind_501@Y2021_M01_D02.ZPH.zip
Wind_501@Y2021_M01_D03.ZPH.zip
Wind_501@Y2021_M01_D04.ZPH.zip
Wind_501@Y2021_M01_D05.ZPH.zip
Wind_501@Y2021_M01_D06.ZPH.zip
Wind_501@Y2021_M01_D07.ZPH.zip
Wind_501@Y2021_M01_D08.ZPH.zip
Wind_501@Y2021_M01_D09.ZPH.zip
Wind_501@Y2021_M01_D10.ZPH.zip
Wind_501@Y2021_M01_D11.ZPH.zip
Wind_501@Y2021_M01_D12.ZPH.zip
Wind_501@Y2021_M01_D13.ZPH.zip
Wind_501@Y2021_M01_D14.ZPH.zip
Wind_501@Y2021_M01_D15.ZPH.zip
Wind_501@Y2021_M01_D16.ZPH.zip
Wind_501@Y2021_M01_D17.ZPH.zip
Wind_501@Y2021_M01_D18.ZPH.zip
Wind_501@Y2021_M01_D19.ZPH.zip
Wind_501@Y2021_M01_D20.ZPH.zip
Wind_501@Y2021_M01_D21.ZPH.zip
Wind_501@Y2021_M01_D22.ZPH.zip
Wind_501@Y2021_M01_D23.ZPH.zip
Wind_501@Y2021_M01_D24.ZPH.zip
Wind_501@Y2021_M01_D25.ZPH.zip
Wind10_501@Y2020_M11_D10.ZPH.zip
Wind10_501@Y2020_M11_D11.ZPH.zip
Wind10_501@Y2020_M11_D12.ZPH.zip
Wind10_501@Y2020_M11_D13.ZPH.zip
Wind10_501@Y2020_M11_D14.ZPH.zip
Wind10_501@Y2020_M11_D15.ZPH.zip
Wind10_501@Y2020_M11_D16.ZPH.zip
Wind10_501@Y2020_M11_D17.ZPH.zip
Wind10_501@Y2020_M11_D18.ZPH.zip
Wind10_501@Y2020_M11_D19.ZPH.zip
Wind10_501@Y2020_M11_D20.ZPH.zip
Wind10_501@Y2020_M11_D21.ZPH.zip
Wind10_501@Y2020_M11_D22.ZPH.zip
Wind10_501@Y2020_M11_D23.ZPH.zip
Wind10_501@Y2020_M11_D24.ZPH.zip
Wind10_501@Y2020_M11_D25.ZPH.zip
Wind10_501@Y2020_M11_D26.ZPH.zip
Wind10_501@Y2020_M11_D27.ZPH.zip
Wind10_501@Y2020_M11_D28.ZPH.zip

Wind10_501@Y2020_M11_D29.ZPH.zip
Wind10_501@Y2020_M11_D30.ZPH.zip
Wind10_501@Y2020_M12_D01.ZPH.zip
Wind10_501@Y2020_M12_D02.ZPH.zip
Wind10_501@Y2020_M12_D03.ZPH.zip
Wind10_501@Y2020_M12_D04.ZPH.zip
Wind10_501@Y2020_M12_D05.ZPH.zip
Wind10_501@Y2020_M12_D06.ZPH.zip
Wind10_501@Y2020_M12_D07.ZPH.zip
Wind10_501@Y2020_M12_D08.ZPH.zip
Wind10_501@Y2020_M12_D09.ZPH.zip
Wind10_501@Y2020_M12_D10.ZPH.zip
Wind10_501@Y2020_M12_D11.ZPH.zip
Wind10_501@Y2020_M12_D12.ZPH.zip
Wind10_501@Y2020_M12_D13.ZPH.zip
Wind10_501@Y2020_M12_D14.ZPH.zip
Wind10_501@Y2020_M12_D15.ZPH.zip
Wind10_501@Y2020_M12_D16.ZPH.zip
Wind10_501@Y2020_M12_D17.ZPH.zip
Wind10_501@Y2020_M12_D18.ZPH.zip
Wind10_501@Y2020_M12_D19.ZPH.zip
Wind10_501@Y2020_M12_D20.ZPH.zip
Wind10_501@Y2020_M12_D21.ZPH.zip
Wind10_501@Y2020_M12_D22.ZPH.zip
Wind10_501@Y2020_M12_D23.ZPH.zip
Wind10_501@Y2020_M12_D24.ZPH.zip
Wind10_501@Y2020_M12_D25.ZPH.zip
Wind10_501@Y2020_M12_D26.ZPH.zip
Wind10_501@Y2020_M12_D27.ZPH.zip
Wind10_501@Y2020_M12_D28.ZPH.zip
Wind10_501@Y2020_M12_D29.ZPH.zip
Wind10_501@Y2020_M12_D30.ZPH.zip
Wind10_501@Y2020_M12_D31.ZPH.zip
Wind10_501@Y2021_M01_D01.ZPH.zip
Wind10_501@Y2021_M01_D02.ZPH.zip
Wind10_501@Y2021_M01_D03.ZPH.zip
Wind10_501@Y2021_M01_D04.ZPH.zip
Wind10_501@Y2021_M01_D05.ZPH.zip
Wind10_501@Y2021_M01_D06.ZPH.zip
Wind10_501@Y2021_M01_D07.ZPH.zip
Wind10_501@Y2021_M01_D08.ZPH.zip
Wind10_501@Y2021_M01_D09.ZPH.zip
Wind10_501@Y2021_M01_D10.ZPH.zip
Wind10_501@Y2021_M01_D11.ZPH.zip
Wind10_501@Y2021_M01_D12.ZPH.zip
Wind10_501@Y2021_M01_D13.ZPH.zip
Wind10_501@Y2021_M01_D14.ZPH.zip
Wind10_501@Y2021_M01_D15.ZPH.zip
Wind10_501@Y2021_M01_D16.ZPH.zip
Wind10_501@Y2021_M01_D17.ZPH.zip

Wind10_501@Y2021_M01_D18.ZPH.zip
Wind10_501@Y2021_M01_D19.ZPH.zip
Wind10_501@Y2021_M01_D20.ZPH.zip
Wind10_501@Y2021_M01_D21.ZPH.zip
Wind10_501@Y2021_M01_D22.ZPH.zip
Wind10_501@Y2021_M01_D23.ZPH.zip
Wind10_501@Y2021_M01_D24.ZPH.zip
Wind10_501@Y2021_M01_D25.ZPH.zip

Raw wave

TNW_D9_TNWB_WS156_11-30Nov20_chpr.csv

TNW_D9_TNWB_WS156_01-25Jan21_chpr.csv

TNW_D9_TNWB_WS156_01-31Dec20_chpr.csv

memspec_TNWB_D9_WS156_2020-11-10--2020-11-30.txt

memspec_TNWB_D9_WS156_2020-12-01--2020-12-31.txt

memspec_TNWB_D9_WS156_2021-01-01--2021-01-25.txt

Thelma

Deployment 10

TNWA-2

WS199

LiDAR

Wind_898@Y2021_M01_D16.ZPH.zip
Wind_898@Y2021_M01_D17.ZPH.zip
Wind_898@Y2021_M01_D18.ZPH.zip
Wind_898@Y2021_M01_D19.ZPH.zip
Wind_898@Y2021_M01_D20.ZPH.zip
Wind_898@Y2021_M01_D21.ZPH.zip
Wind_898@Y2021_M01_D22.ZPH.zip
Wind_898@Y2021_M01_D23.ZPH.zip
Wind_898@Y2021_M01_D24.ZPH.zip
Wind_898@Y2021_M01_D25.ZPH.zip
Wind_898@Y2021_M01_D26.ZPH.zip
Wind_898@Y2021_M01_D27.ZPH.zip
Wind_898@Y2021_M01_D28.ZPH.zip
Wind_898@Y2021_M01_D29.ZPH.zip
Wind_898@Y2021_M01_D30.ZPH.zip
Wind_898@Y2021_M01_D31.ZPH.zip
Wind_898@Y2021_M02_D01.ZPH.zip
Wind_898@Y2021_M02_D02.ZPH.zip
Wind_898@Y2021_M02_D03.ZPH.zip
Wind_898@Y2021_M02_D04.ZPH.zip
Wind_898@Y2021_M02_D05.ZPH.zip
Wind_898@Y2021_M02_D06.ZPH.zip
Wind_898@Y2021_M02_D07.ZPH.zip
Wind_898@Y2021_M02_D08.ZPH.zip
Wind_898@Y2021_M02_D09.ZPH.zip
Wind_898@Y2021_M02_D10.ZPH.zip
Wind_898@Y2021_M02_D11.ZPH.zip
Wind_898@Y2021_M02_D12.ZPH.zip
Wind_898@Y2021_M02_D13.ZPH.zip
Wind_898@Y2021_M02_D14.ZPH.zip
Wind_898@Y2021_M02_D15.ZPH.zip
Wind_898@Y2021_M02_D16.ZPH.zip
Wind_898@Y2021_M02_D17.ZPH.zip
Wind_898@Y2021_M02_D18.ZPH.zip
Wind_898@Y2021_M02_D19.ZPH.zip
Wind_898@Y2021_M02_D20.ZPH.zip
Wind_898@Y2021_M02_D21.ZPH.zip
Wind_898@Y2021_M02_D22.ZPH.zip
Wind_898@Y2021_M02_D23.ZPH.zip
Wind_898@Y2021_M02_D24.ZPH.zip
Wind_898@Y2021_M02_D25.ZPH.zip
Wind_898@Y2021_M02_D26.ZPH.zip
Wind_898@Y2021_M02_D27.ZPH.zip
Wind_898@Y2021_M02_D28.ZPH.zip
Wind_898@Y2021_M03_D01.ZPH.zip
Wind_898@Y2021_M03_D02.ZPH.zip

Aquadopp

aquadopp-2021-01-16.txt
aquadopp-2021-01-17.txt
aquadopp-2021-01-18.txt
aquadopp-2021-01-19.txt
aquadopp-2021-01-20.txt
aquadopp-2021-01-21.txt
aquadopp-2021-01-22.txt
aquadopp-2021-01-23.txt
aquadopp-2021-01-24.txt
aquadopp-2021-01-25.txt
aquadopp-2021-01-26.txt
aquadopp-2021-01-27.txt
aquadopp-2021-01-28.txt
aquadopp-2021-01-29.txt
aquadopp-2021-01-30.txt
aquadopp-2021-01-31.txt
aquadopp-2021-02-01.txt
aquadopp-2021-02-02.txt
aquadopp-2021-02-03.txt
aquadopp-2021-02-04.txt
aquadopp-2021-02-05.txt
aquadopp-2021-02-06.txt
aquadopp-2021-02-07.txt
aquadopp-2021-02-08.txt
aquadopp-2021-02-09.txt
aquadopp-2021-02-10.txt
aquadopp-2021-02-11.txt
aquadopp-2021-02-12.txt
aquadopp-2021-02-13.txt
aquadopp-2021-02-14.txt
aquadopp-2021-02-15.txt
aquadopp-2021-02-16.txt
aquadopp-2021-02-17.txt
aquadopp-2021-02-18.txt
aquadopp-2021-02-19.txt
aquadopp-2021-02-20.txt
aquadopp-2021-02-21.txt
aquadopp-2021-02-22.txt
aquadopp-2021-02-23.txt
aquadopp-2021-02-24.txt
aquadopp-2021-02-25.txt
aquadopp-2021-02-26.txt
aquadopp-2021-02-27.txt
aquadopp-2021-02-28.txt
aquadopp-2021-03-01.txt
aquadopp-2021-03-02.txt

Wind_898@Y2021_M03_D03.ZPH.zip	aquadopp-2021-03-03.txt
Wind_898@Y2021_M03_D04.ZPH.zip	aquadopp-2021-03-04.txt
Wind_898@Y2021_M03_D05.ZPH.zip	aquadopp-2021-03-05.txt
Wind_898@Y2021_M03_D06.ZPH.zip	aquadopp-2021-03-06.txt
Wind_898@Y2021_M03_D07.ZPH.zip	aquadopp-2021-03-07.txt
Wind_898@Y2021_M03_D08.ZPH.zip	aquadopp-2021-03-08.txt
Wind_898@Y2021_M03_D09.ZPH.zip	aquadopp-2021-03-09.txt
Wind_898@Y2021_M03_D10.ZPH.zip	aquadopp-2021-03-10.txt
Wind_898@Y2021_M03_D11.ZPH.zip	aquadopp-2021-03-11.txt
Wind_898@Y2021_M03_D12.ZPH.zip	aquadopp-2021-03-12.txt
Wind_898@Y2021_M03_D13.ZPH.zip	aquadopp-2021-03-13.txt
Wind_898@Y2021_M03_D14.ZPH.zip	aquadopp-2021-03-14.txt
Wind_898@Y2021_M03_D15.ZPH.zip	aquadopp-2021-03-15.txt
Wind_898@Y2021_M03_D16.ZPH.zip	aquadopp-2021-03-16.txt
Wind_898@Y2021_M03_D17.ZPH.zip	aquadopp-2021-03-17.txt
Wind_898@Y2021_M03_D18.ZPH.zip	aquadopp-2021-03-18.txt
Wind_898@Y2021_M03_D19.ZPH.zip	aquadopp-2021-03-19.txt
Wind_898@Y2021_M03_D20.ZPH.zip	aquadopp-2021-03-20.txt
Wind_898@Y2021_M03_D21.ZPH.zip	aquadopp-2021-03-21.txt
Wind_898@Y2021_M03_D22.ZPH.zip	aquadopp-2021-03-22.txt
Wind_898@Y2021_M03_D23.ZPH.zip	aquadopp-2021-03-23.txt
Wind_898@Y2021_M03_D24.ZPH.zip	aquadopp-2021-03-24.txt
Wind_898@Y2021_M03_D25.ZPH.zip	aquadopp-2021-03-25.txt
Wind_898@Y2021_M03_D26.ZPH.zip	aquadopp-2021-03-26.txt
Wind_898@Y2021_M03_D27.ZPH.zip	aquadopp-2021-03-27.txt
Wind_898@Y2021_M03_D28.ZPH.zip	aquadopp-2021-03-28.txt
Wind_898@Y2021_M03_D29.ZPH.zip	aquadopp-2021-03-29.txt
Wind_898@Y2021_M03_D30.ZPH.zip	aquadopp-2021-03-30.txt
Wind_898@Y2021_M03_D31.ZPH.zip	aquadopp-2021-03-31.txt
Wind_898@Y2021_M04_D01.ZPH.zip	aquadopp-2021-04-01.txt
Wind_898@Y2021_M04_D02.ZPH.zip	aquadopp-2021-04-02.txt
Wind_898@Y2021_M04_D03.ZPH.zip	aquadopp-2021-04-03.txt
Wind_898@Y2021_M04_D04.ZPH.zip	aquadopp-2021-04-04.txt
Wind_898@Y2021_M04_D05.ZPH.zip	aquadopp-2021-04-05.txt
Wind_898@Y2021_M04_D06.ZPH.zip	aquadopp-2021-04-06.txt
Wind_898@Y2021_M04_D07.ZPH.zip	aquadopp-2021-04-07.txt
Wind_898@Y2021_M04_D08.ZPH.zip	aquadopp-2021-04-08.txt
Wind_898@Y2021_M04_D09.ZPH.zip	aquadopp-2021-04-09.txt
Wind_898@Y2021_M04_D10.ZPH.zip	aquadopp-2021-04-10.txt
Wind_898@Y2021_M04_D11.ZPH.zip	aquadopp-2021-04-11.txt
Wind_898@Y2021_M04_D12.ZPH.zip	aquadopp-2021-04-12.txt
Wind_898@Y2021_M04_D13.ZPH.zip	aquadopp-2021-04-13.txt
Wind_898@Y2021_M04_D14.ZPH.zip	aquadopp-2021-04-14.txt
Wind_898@Y2021_M04_D15.ZPH.zip	aquadopp-2021-04-15.txt
Wind_898@Y2021_M04_D16.ZPH.zip	aquadopp-2021-04-16.txt
Wind_898@Y2021_M04_D17.ZPH.zip	aquadopp-2021-04-17.txt
Wind_898@Y2021_M04_D18.ZPH.zip	aquadopp-2021-04-18.txt
Wind_898@Y2021_M04_D19.ZPH.zip	aquadopp-2021-04-19.txt
Wind_898@Y2021_M04_D20.ZPH.zip	aquadopp-2021-04-20.txt
Wind_898@Y2021_M04_D21.ZPH.zip	aquadopp-2021-04-21.txt

Wind_898@Y2021_M04_D22.ZPH.zip	aquadopp-2021-04-22.txt
Wind_898@Y2021_M04_D23.ZPH.zip	aquadopp-2021-04-23.txt
Wind_898@Y2021_M04_D24.ZPH.zip	aquadopp-2021-04-24.txt
Wind_898@Y2021_M04_D25.ZPH.zip	aquadopp-2021-04-25.txt
Wind_898@Y2021_M04_D26.ZPH.zip	aquadopp-2021-04-26.txt
Wind_898@Y2021_M04_D27.ZPH.zip	aquadopp-2021-04-27.txt
Wind_898@Y2021_M04_D28.ZPH.zip	aquadopp-2021-04-28.txt
Wind_898@Y2021_M04_D29.ZPH.zip	aquadopp-2021-04-29.txt
Wind_898@Y2021_M04_D30.ZPH.zip	aquadopp-2021-04-30.txt
Wind_898@Y2021_M05_D01.ZPH.zip	aquadopp-2021-05-01.txt
Wind_898@Y2021_M05_D02.ZPH.zip	aquadopp-2021-05-02.txt
Wind_898@Y2021_M05_D03.ZPH.zip	aquadopp-2021-05-03.txt
Wind_898@Y2021_M05_D04.ZPH.zip	aquadopp-2021-05-04.txt
Wind_898@Y2021_M05_D05.ZPH.zip	aquadopp-2021-05-05.txt
Wind_898@Y2021_M05_D06.ZPH.zip	aquadopp-2021-05-06.txt
Wind_898@Y2021_M05_D07.ZPH.zip	aquadopp-2021-05-07.txt
Wind_898@Y2021_M05_D08.ZPH.zip	aquadopp-2021-05-08.txt
Wind_898@Y2021_M05_D09.ZPH.zip	aquadopp-2021-05-09.txt
Wind_898@Y2021_M05_D10.ZPH.zip	aquadopp-2021-05-10.txt
Wind_898@Y2021_M05_D11.ZPH.zip	aquadopp-2021-05-11.txt
Wind_898@Y2021_M05_D12.ZPH.zip	aquadopp-2021-05-12.txt
Wind_898@Y2021_M05_D13.ZPH.zip	aquadopp-2021-05-13.txt
Wind_898@Y2021_M05_D14.ZPH.zip	aquadopp-2021-05-14.txt
Wind_898@Y2021_M05_D15.ZPH.zip	aquadopp-2021-05-15.txt
Wind_898@Y2021_M05_D16.ZPH.zip	aquadopp-2021-05-16.txt
Wind_898@Y2021_M05_D17.ZPH.zip	aquadopp-2021-05-17.txt
Wind_898@Y2021_M05_D18.ZPH.zip	aquadopp-2021-05-18.txt
Wind_898@Y2021_M05_D19.ZPH.zip	aquadopp-2021-05-19.txt
Wind_898@Y2021_M05_D20.ZPH.zip	aquadopp-2021-05-20.txt
Wind_898@Y2021_M05_D21.ZPH.zip	aquadopp-2021-05-21.txt
Wind_898@Y2021_M05_D22.ZPH.zip	aquadopp-2021-05-22.txt
Wind_898@Y2021_M05_D23.ZPH.zip	aquadopp-2021-05-23.txt
Wind_898@Y2021_M05_D24.ZPH.zip	aquadopp-2021-05-24.txt
Wind_898@Y2021_M05_D25.ZPH.zip	aquadopp-2021-05-25.txt
Wind_898@Y2021_M05_D26.ZPH.zip	aquadopp-2021-05-26.txt
Wind_898@Y2021_M05_D27.ZPH.zip	aquadopp-2021-05-27.txt
Wind_898@Y2021_M05_D28.ZPH.zip	aquadopp-2021-05-28.txt
Wind_898@Y2021_M05_D29.ZPH.zip	aquadopp-2021-05-29.txt
Wind_898@Y2021_M05_D30.ZPH.zip	aquadopp-2021-05-30.txt
Wind_898@Y2021_M05_D31.ZPH.zip	aquadopp-2021-05-31.txt
Wind_898@Y2021_M06_D01.ZPH.zip	aquadopp-2021-06-01.txt
Wind_898@Y2021_M06_D02.ZPH.zip	aquadopp-2021-06-02.txt
Wind_898@Y2021_M06_D03.ZPH.zip	aquadopp-2021-06-03.txt
Wind_898@Y2021_M06_D04.ZPH.zip	aquadopp-2021-06-04.txt
Wind_898@Y2021_M06_D05.ZPH.zip	aquadopp-2021-06-05.txt
Wind_898@Y2021_M06_D06.ZPH.zip	aquadopp-2021-06-06.txt
Wind_898@Y2021_M06_D07.ZPH.zip	aquadopp-2021-06-07.txt
Wind_898@Y2021_M06_D08.ZPH.zip	aquadopp-2021-06-08.txt
Wind_898@Y2021_M06_D09.ZPH.zip	aquadopp-2021-06-09.txt
Wind_898@Y2021_M06_D10.ZPH.zip	aquadopp-2021-06-10.txt

Wind_898@Y2021_M06_D11.ZPH.zip	aquadopp-2021-06-11.txt
Wind_898@Y2021_M06_D12.ZPH.zip	aquadopp-2021-06-12.txt
Wind_898@Y2021_M06_D13.ZPH.zip	aquadopp-2021-06-13.txt
Wind_898@Y2021_M06_D14.ZPH.zip	aquadopp-2021-06-14.txt
Wind_898@Y2021_M06_D15.ZPH.zip	aquadopp-2021-06-15.txt
Wind_898@Y2021_M06_D16.ZPH.zip	aquadopp-2021-06-16.txt
Wind_898@Y2021_M06_D17.ZPH.zip	aquadopp-2021-06-17.txt
Wind_898@Y2021_M06_D18.ZPH.zip	aquadopp-2021-06-18.txt
Wind_898@Y2021_M06_D19.ZPH.zip	aquadopp-2021-06-19.txt
Wind_898@Y2021_M06_D20.ZPH.zip	aquadopp-2021-06-20.txt
Wind10_898@Y2021_M01_D16.ZPH.zip	
Wind10_898@Y2021_M01_D17.ZPH.zip	
Wind10_898@Y2021_M01_D18.ZPH.zip	
Wind10_898@Y2021_M01_D19.ZPH.zip	
Wind10_898@Y2021_M01_D20.ZPH.zip	
Wind10_898@Y2021_M01_D21.ZPH.zip	
Wind10_898@Y2021_M01_D22.ZPH.zip	
Wind10_898@Y2021_M01_D23.ZPH.zip	
Wind10_898@Y2021_M01_D24.ZPH.zip	
Wind10_898@Y2021_M01_D25.ZPH.zip	
Wind10_898@Y2021_M01_D26.ZPH.zip	
Wind10_898@Y2021_M01_D27.ZPH.zip	
Wind10_898@Y2021_M01_D28.ZPH.zip	
Wind10_898@Y2021_M01_D29.ZPH.zip	
Wind10_898@Y2021_M01_D30.ZPH.zip	
Wind10_898@Y2021_M01_D31.ZPH.zip	
Wind10_898@Y2021_M02_D01.ZPH.zip	
Wind10_898@Y2021_M02_D02.ZPH.zip	
Wind10_898@Y2021_M02_D03.ZPH.zip	
Wind10_898@Y2021_M02_D04.ZPH.zip	
Wind10_898@Y2021_M02_D05.ZPH.zip	
Wind10_898@Y2021_M02_D06.ZPH.zip	
Wind10_898@Y2021_M02_D07.ZPH.zip	
Wind10_898@Y2021_M02_D08.ZPH.zip	
Wind10_898@Y2021_M02_D09.ZPH.zip	
Wind10_898@Y2021_M02_D10.ZPH.zip	
Wind10_898@Y2021_M02_D11.ZPH.zip	
Wind10_898@Y2021_M02_D12.ZPH.zip	
Wind10_898@Y2021_M02_D13.ZPH.zip	
Wind10_898@Y2021_M02_D14.ZPH.zip	
Wind10_898@Y2021_M02_D15.ZPH.zip	
Wind10_898@Y2021_M02_D16.ZPH.zip	
Wind10_898@Y2021_M02_D17.ZPH.zip	
Wind10_898@Y2021_M02_D18.ZPH.zip	
Wind10_898@Y2021_M02_D19.ZPH.zip	
Wind10_898@Y2021_M02_D20.ZPH.zip	
Wind10_898@Y2021_M02_D21.ZPH.zip	
Wind10_898@Y2021_M02_D22.ZPH.zip	
Wind10_898@Y2021_M02_D23.ZPH.zip	
Wind10_898@Y2021_M02_D24.ZPH.zip	

Wind10_898@Y2021_M02_D25.ZPH.zip
Wind10_898@Y2021_M02_D26.ZPH.zip
Wind10_898@Y2021_M02_D27.ZPH.zip
Wind10_898@Y2021_M02_D28.ZPH.zip
Wind10_898@Y2021_M03_D01.ZPH.zip
Wind10_898@Y2021_M03_D02.ZPH.zip
Wind10_898@Y2021_M03_D03.ZPH.zip
Wind10_898@Y2021_M03_D04.ZPH.zip
Wind10_898@Y2021_M03_D05.ZPH.zip
Wind10_898@Y2021_M03_D06.ZPH.zip
Wind10_898@Y2021_M03_D07.ZPH.zip
Wind10_898@Y2021_M03_D08.ZPH.zip
Wind10_898@Y2021_M03_D09.ZPH.zip
Wind10_898@Y2021_M03_D10.ZPH.zip
Wind10_898@Y2021_M03_D11.ZPH.zip
Wind10_898@Y2021_M03_D12.ZPH.zip
Wind10_898@Y2021_M03_D13.ZPH.zip
Wind10_898@Y2021_M03_D14.ZPH.zip
Wind10_898@Y2021_M03_D15.ZPH.zip
Wind10_898@Y2021_M03_D16.ZPH.zip
Wind10_898@Y2021_M03_D17.ZPH.zip
Wind10_898@Y2021_M03_D18.ZPH.zip
Wind10_898@Y2021_M03_D19.ZPH.zip
Wind10_898@Y2021_M03_D20.ZPH.zip
Wind10_898@Y2021_M03_D21.ZPH.zip
Wind10_898@Y2021_M03_D22.ZPH.zip
Wind10_898@Y2021_M03_D23.ZPH.zip
Wind10_898@Y2021_M03_D24.ZPH.zip
Wind10_898@Y2021_M03_D25.ZPH.zip
Wind10_898@Y2021_M03_D26.ZPH.zip
Wind10_898@Y2021_M03_D27.ZPH.zip
Wind10_898@Y2021_M03_D28.ZPH.zip
Wind10_898@Y2021_M03_D29.ZPH.zip
Wind10_898@Y2021_M03_D30.ZPH.zip
Wind10_898@Y2021_M03_D31.ZPH.zip
Wind10_898@Y2021_M04_D01.ZPH.zip
Wind10_898@Y2021_M04_D02.ZPH.zip
Wind10_898@Y2021_M04_D03.ZPH.zip
Wind10_898@Y2021_M04_D04.ZPH.zip
Wind10_898@Y2021_M04_D05.ZPH.zip
Wind10_898@Y2021_M04_D06.ZPH.zip
Wind10_898@Y2021_M04_D07.ZPH.zip
Wind10_898@Y2021_M04_D08.ZPH.zip
Wind10_898@Y2021_M04_D09.ZPH.zip
Wind10_898@Y2021_M04_D10.ZPH.zip
Wind10_898@Y2021_M04_D11.ZPH.zip
Wind10_898@Y2021_M04_D12.ZPH.zip
Wind10_898@Y2021_M04_D13.ZPH.zip
Wind10_898@Y2021_M04_D14.ZPH.zip
Wind10_898@Y2021_M04_D15.ZPH.zip

Wind10_898@Y2021_M04_D16.ZPH.zip
Wind10_898@Y2021_M04_D17.ZPH.zip
Wind10_898@Y2021_M04_D18.ZPH.zip
Wind10_898@Y2021_M04_D19.ZPH.zip
Wind10_898@Y2021_M04_D20.ZPH.zip
Wind10_898@Y2021_M04_D21.ZPH.zip
Wind10_898@Y2021_M04_D22.ZPH.zip
Wind10_898@Y2021_M04_D23.ZPH.zip
Wind10_898@Y2021_M04_D24.ZPH.zip
Wind10_898@Y2021_M04_D25.ZPH.zip
Wind10_898@Y2021_M04_D26.ZPH.zip
Wind10_898@Y2021_M04_D27.ZPH.zip
Wind10_898@Y2021_M04_D28.ZPH.zip
Wind10_898@Y2021_M04_D29.ZPH.zip
Wind10_898@Y2021_M04_D30.ZPH.zip
Wind10_898@Y2021_M05_D01.ZPH.zip
Wind10_898@Y2021_M05_D02.ZPH.zip
Wind10_898@Y2021_M05_D03.ZPH.zip
Wind10_898@Y2021_M05_D04.ZPH.zip
Wind10_898@Y2021_M05_D05.ZPH.zip
Wind10_898@Y2021_M05_D06.ZPH.zip
Wind10_898@Y2021_M05_D07.ZPH.zip
Wind10_898@Y2021_M05_D08.ZPH.zip
Wind10_898@Y2021_M05_D09.ZPH.zip
Wind10_898@Y2021_M05_D10.ZPH.zip
Wind10_898@Y2021_M05_D11.ZPH.zip
Wind10_898@Y2021_M05_D12.ZPH.zip
Wind10_898@Y2021_M05_D13.ZPH.zip
Wind10_898@Y2021_M05_D14.ZPH.zip
Wind10_898@Y2021_M05_D15.ZPH.zip
Wind10_898@Y2021_M05_D16.ZPH.zip
Wind10_898@Y2021_M05_D17.ZPH.zip
Wind10_898@Y2021_M05_D18.ZPH.zip
Wind10_898@Y2021_M05_D19.ZPH.zip
Wind10_898@Y2021_M05_D20.ZPH.zip
Wind10_898@Y2021_M05_D21.ZPH.zip
Wind10_898@Y2021_M05_D22.ZPH.zip
Wind10_898@Y2021_M05_D23.ZPH.zip
Wind10_898@Y2021_M05_D24.ZPH.zip
Wind10_898@Y2021_M05_D25.ZPH.zip
Wind10_898@Y2021_M05_D26.ZPH.zip
Wind10_898@Y2021_M05_D27.ZPH.zip
Wind10_898@Y2021_M05_D28.ZPH.zip
Wind10_898@Y2021_M05_D29.ZPH.zip
Wind10_898@Y2021_M05_D30.ZPH.zip
Wind10_898@Y2021_M05_D31.ZPH.zip
Wind10_898@Y2021_M06_D01.ZPH.zip
Wind10_898@Y2021_M06_D02.ZPH.zip
Wind10_898@Y2021_M06_D03.ZPH.zip
Wind10_898@Y2021_M06_D04.ZPH.zip

Wind10_898@Y2021_M06_D05.ZPH.zip
Wind10_898@Y2021_M06_D06.ZPH.zip
Wind10_898@Y2021_M06_D07.ZPH.zip
Wind10_898@Y2021_M06_D08.ZPH.zip
Wind10_898@Y2021_M06_D09.ZPH.zip
Wind10_898@Y2021_M06_D10.ZPH.zip
Wind10_898@Y2021_M06_D11.ZPH.zip
Wind10_898@Y2021_M06_D12.ZPH.zip
Wind10_898@Y2021_M06_D13.ZPH.zip
Wind10_898@Y2021_M06_D14.ZPH.zip
Wind10_898@Y2021_M06_D15.ZPH.zip
Wind10_898@Y2021_M06_D16.ZPH.zip
Wind10_898@Y2021_M06_D17.ZPH.zip
Wind10_898@Y2021_M06_D18.ZPH.zip
Wind10_898@Y2021_M06_D19.ZPH.zip
Wind10_898@Y2021_M06_D20.ZPH.zip

Raw wave

TNW_D10_TNWA2_WS199_16-31Jan21_chpr.csv
TNW_D10_TNWA2_WS199_01-28Feb21_chpr.csv
TNW_D10_TNWA2_WS199_01-31Mar21_chpr.csv
TNW_D10_TNWA2_WS199_01-30Apr21_chpr.csv
TNW_D10_TNWA2_WS199_01-31May21_chpr.csv
TNW_D10_TNWA2_WS199_01-20Jun21_chpr.csv
memspec_TNWA2_D10_WS199_2021-01-16--2021-01-31.txt
memspec_TNWA2_D10_WS199_2021-02-01--2021-02-28.txt
memspec_TNWA2_D10_WS199_2021-03-01--2021-03-31.txt
memspec_TNWA2_D10_WS199_2021-04-01--2021-04-30.txt
memspec_TNWA2_D10_WS199_2021-05-01--2021-05-31.txt
memspec_TNWA2_D10_WS199_2021-06-01--2021-06-20.txt

Thelma

D10_TNWA-2_thelma_tagID.txt
thelma-2021-01-16.bin
thelma-2021-01-17.bin
thelma-2021-01-18.bin
thelma-2021-01-19.bin
thelma-2021-01-20.bin
thelma-2021-01-21.bin
thelma-2021-01-22.bin
thelma-2021-01-23.bin
thelma-2021-01-24.bin
thelma-2021-01-25.bin
thelma-2021-01-26.bin
thelma-2021-01-27.bin
thelma-2021-01-28.bin
thelma-2021-01-29.bin
thelma-2021-01-30.bin
thelma-2021-01-31.bin
thelma-2021-02-01.bin
thelma-2021-02-02.bin
thelma-2021-02-03.bin
thelma-2021-02-04.bin
thelma-2021-02-05.bin
thelma-2021-02-06.bin
thelma-2021-02-07.bin
thelma-2021-02-08.bin
thelma-2021-02-09.bin
thelma-2021-02-10.bin
thelma-2021-02-11.bin
thelma-2021-02-12.bin
thelma-2021-02-13.bin
thelma-2021-02-14.bin
thelma-2021-02-15.bin
thelma-2021-02-16.bin
thelma-2021-02-17.bin
thelma-2021-02-18.bin
thelma-2021-02-19.bin
thelma-2021-02-20.bin
thelma-2021-02-21.bin
thelma-2021-02-22.bin
thelma-2021-02-23.bin
thelma-2021-02-24.bin
thelma-2021-02-25.bin
thelma-2021-02-26.bin
thelma-2021-02-27.bin
thelma-2021-02-28.bin
thelma-2021-03-01.bin

thelma-2021-03-02.bin
thelma-2021-03-03.bin
thelma-2021-03-04.bin
thelma-2021-03-05.bin
thelma-2021-03-06.bin
thelma-2021-03-07.bin
thelma-2021-03-08.bin
thelma-2021-03-09.bin
thelma-2021-03-10.bin
thelma-2021-03-11.bin
thelma-2021-03-12.bin
thelma-2021-03-13.bin
thelma-2021-03-14.bin
thelma-2021-03-15.bin
thelma-2021-03-16.bin
thelma-2021-03-17.bin
thelma-2021-03-18.bin
thelma-2021-03-19.bin
thelma-2021-03-20.bin
thelma-2021-03-21.bin
thelma-2021-03-22.bin
thelma-2021-03-23.bin
thelma-2021-03-24.bin
thelma-2021-03-25.bin
thelma-2021-03-26.bin
thelma-2021-03-27.bin
thelma-2021-03-28.bin
thelma-2021-03-29.bin
thelma-2021-03-30.bin
thelma-2021-03-31.bin
thelma-2021-04-01.bin
thelma-2021-04-02.bin
thelma-2021-04-03.bin
thelma-2021-04-04.bin
thelma-2021-04-05.bin
thelma-2021-04-06.bin
thelma-2021-04-07.bin
thelma-2021-04-08.bin
thelma-2021-04-09.bin
thelma-2021-04-10.bin
thelma-2021-04-11.bin
thelma-2021-04-12.bin
thelma-2021-04-13.bin
thelma-2021-04-14.bin
thelma-2021-04-15.bin
thelma-2021-04-16.bin
thelma-2021-04-17.bin
thelma-2021-04-18.bin
thelma-2021-04-19.bin
thelma-2021-04-20.bin

thelma-2021-04-21.bin
thelma-2021-04-22.bin
thelma-2021-04-23.bin
thelma-2021-04-24.bin
thelma-2021-04-25.bin
thelma-2021-04-26.bin
thelma-2021-04-27.bin
thelma-2021-04-28.bin
thelma-2021-04-29.bin
thelma-2021-04-30.bin
thelma-2021-05-01.bin
thelma-2021-05-02.bin
thelma-2021-05-03.bin
thelma-2021-05-04.bin
thelma-2021-05-05.bin
thelma-2021-05-06.bin
thelma-2021-05-07.bin
thelma-2021-05-08.bin
thelma-2021-05-09.bin
thelma-2021-05-10.bin
thelma-2021-05-11.bin
thelma-2021-05-12.bin
thelma-2021-05-13.bin
thelma-2021-05-14.bin
thelma-2021-05-15.bin
thelma-2021-05-16.bin
thelma-2021-05-17.bin
thelma-2021-05-18.bin
thelma-2021-05-19.bin
thelma-2021-05-20.bin
thelma-2021-05-21.bin
thelma-2021-05-22.bin
thelma-2021-05-23.bin
thelma-2021-05-24.bin
thelma-2021-05-25.bin
thelma-2021-05-26.bin
thelma-2021-05-27.bin
thelma-2021-05-28.bin
thelma-2021-05-29.bin
thelma-2021-05-30.bin
thelma-2021-05-31.bin
thelma-2021-06-01.bin
thelma-2021-06-02.bin
thelma-2021-06-03.bin
thelma-2021-06-04.bin
thelma-2021-06-05.bin
thelma-2021-06-06.bin
thelma-2021-06-07.bin
thelma-2021-06-08.bin
thelma-2021-06-09.bin

thelma-2021-06-10.bin
thelma-2021-06-11.bin
thelma-2021-06-12.bin
thelma-2021-06-13.bin
thelma-2021-06-14.bin
thelma-2021-06-15.bin
thelma-2021-06-16.bin
thelma-2021-06-17.bin
thelma-2021-06-18.bin
thelma-2021-06-19.bin
thelma-2021-06-20.bin

Deployment 11

TNWB

WS187

LiDAR

Wind_818@Y2021_M01_D25.ZPH.zip
Wind_818@Y2021_M01_D26.ZPH.zip
Wind_818@Y2021_M01_D27.ZPH.zip
Wind_818@Y2021_M01_D28.ZPH.zip
Wind_818@Y2021_M01_D29.ZPH.zip
Wind_818@Y2021_M01_D30.ZPH.zip
Wind_818@Y2021_M01_D31.ZPH.zip
Wind_818@Y2021_M02_D01.ZPH.zip
Wind_818@Y2021_M02_D02.ZPH.zip
Wind_818@Y2021_M02_D03.ZPH.zip
Wind_818@Y2021_M02_D04.ZPH.zip
Wind_818@Y2021_M02_D05.ZPH.zip
Wind_818@Y2021_M02_D06.ZPH.zip
Wind_818@Y2021_M02_D07.ZPH.zip
Wind_818@Y2021_M02_D08.ZPH.zip
Wind_818@Y2021_M02_D09.ZPH.zip
Wind_818@Y2021_M02_D10.ZPH.zip
Wind_818@Y2021_M02_D11.ZPH.zip
Wind_818@Y2021_M02_D12.ZPH.zip
Wind_818@Y2021_M02_D13.ZPH.zip
Wind_818@Y2021_M02_D14.ZPH.zip
Wind_818@Y2021_M02_D15.ZPH.zip
Wind10_818@Y2021_M01_D25.ZPH.zip
Wind10_818@Y2021_M01_D26.ZPH.zip
Wind10_818@Y2021_M01_D27.ZPH.zip
Wind10_818@Y2021_M01_D28.ZPH.zip
Wind10_818@Y2021_M01_D29.ZPH.zip
Wind10_818@Y2021_M01_D30.ZPH.zip
Wind10_818@Y2021_M01_D31.ZPH.zip
Wind10_818@Y2021_M02_D01.ZPH.zip
Wind10_818@Y2021_M02_D02.ZPH.zip
Wind10_818@Y2021_M02_D03.ZPH.zip
Wind10_818@Y2021_M02_D04.ZPH.zip
Wind10_818@Y2021_M02_D05.ZPH.zip
Wind10_818@Y2021_M02_D06.ZPH.zip
Wind10_818@Y2021_M02_D07.ZPH.zip
Wind10_818@Y2021_M02_D08.ZPH.zip
Wind10_818@Y2021_M02_D09.ZPH.zip
Wind10_818@Y2021_M02_D10.ZPH.zip
Wind10_818@Y2021_M02_D11.ZPH.zip
Wind10_818@Y2021_M02_D12.ZPH.zip
Wind10_818@Y2021_M02_D13.ZPH.zip
Wind10_818@Y2021_M02_D14.ZPH.zip
Wind10_818@Y2021_M02_D15.ZPH.zip

Aquadopp

aquadopp-2021-01-25.txt
aquadopp-2021-01-26.txt
aquadopp-2021-01-27.txt
aquadopp-2021-01-28.txt
aquadopp-2021-01-29.txt
aquadopp-2021-01-30.txt
aquadopp-2021-01-31.txt
aquadopp-2021-02-01.txt
aquadopp-2021-02-02.txt
aquadopp-2021-02-03.txt
aquadopp-2021-02-04.txt
aquadopp-2021-02-05.txt
aquadopp-2021-02-06.txt
aquadopp-2021-02-07.txt
aquadopp-2021-02-08.txt
aquadopp-2021-02-09.txt
aquadopp-2021-02-10.txt
aquadopp-2021-02-11.txt
aquadopp-2021-02-12.txt
aquadopp-2021-02-13.txt
aquadopp-2021-02-14.txt
aquadopp-2021-02-15.txt

Raw wave

TNW_D11_TNWB_WS187_25-31Jan21_chpr.csv

TNW_D11_TNWB_WS187_01-15Feb21_chpr.csv

memspec_TNWB_D11_WS187_2021-01-25--2021-01-31.txt

memspec_TNWB_D11_WS187_2021-02-01--2021-02-15.txt

Thelma

Deployment 12

TNWB-2

WS187

LiDAR

Wind_818@Y2021_M03_D03.ZPH.zip
Wind_818@Y2021_M03_D04.ZPH.zip
Wind_818@Y2021_M03_D05.ZPH.zip
Wind_818@Y2021_M03_D06.ZPH.zip
Wind_818@Y2021_M03_D07.ZPH.zip
Wind_818@Y2021_M03_D08.ZPH.zip
Wind_818@Y2021_M03_D09.ZPH.zip
Wind_818@Y2021_M03_D10.ZPH.zip
Wind_818@Y2021_M03_D11.ZPH.zip
Wind_818@Y2021_M03_D12.ZPH.zip
Wind_818@Y2021_M03_D13.ZPH.zip
Wind_818@Y2021_M03_D14.ZPH.zip
Wind_818@Y2021_M03_D15.ZPH.zip
Wind_818@Y2021_M03_D16.ZPH.zip
Wind_818@Y2021_M03_D17.ZPH.zip
Wind_818@Y2021_M03_D18.ZPH.zip
Wind_818@Y2021_M03_D19.ZPH.zip
Wind_818@Y2021_M03_D20.ZPH.zip
Wind_818@Y2021_M03_D21.ZPH.zip
Wind_818@Y2021_M03_D22.ZPH.zip
Wind_818@Y2021_M03_D23.ZPH.zip
Wind_818@Y2021_M03_D24.ZPH.zip
Wind_818@Y2021_M03_D25.ZPH.zip
Wind_818@Y2021_M03_D26.ZPH.zip
Wind_818@Y2021_M03_D27.ZPH.zip
Wind_818@Y2021_M03_D28.ZPH.zip
Wind_818@Y2021_M03_D29.ZPH.zip
Wind_818@Y2021_M03_D30.ZPH.zip
Wind_818@Y2021_M03_D31.ZPH.zip
Wind_818@Y2021_M04_D01.ZPH.zip
Wind_818@Y2021_M04_D02.ZPH.zip
Wind_818@Y2021_M04_D03.ZPH.zip
Wind_818@Y2021_M04_D04.ZPH.zip
Wind10_818@Y2021_M03_D03.ZPH.zip
Wind10_818@Y2021_M03_D04.ZPH.zip
Wind10_818@Y2021_M03_D05.ZPH.zip
Wind10_818@Y2021_M03_D06.ZPH.zip
Wind10_818@Y2021_M03_D07.ZPH.zip
Wind10_818@Y2021_M03_D08.ZPH.zip
Wind10_818@Y2021_M03_D09.ZPH.zip
Wind10_818@Y2021_M03_D10.ZPH.zip
Wind10_818@Y2021_M03_D11.ZPH.zip
Wind10_818@Y2021_M03_D12.ZPH.zip
Wind10_818@Y2021_M03_D13.ZPH.zip
Wind10_818@Y2021_M03_D14.ZPH.zip
Wind10_818@Y2021_M03_D15.ZPH.zip

Aquadopp

aquadopp-2021-03-03.txt
aquadopp-2021-03-04.txt
aquadopp-2021-03-05.txt
aquadopp-2021-03-06.txt

Wind10_818@Y2021_M03_D16.ZPH.zip
Wind10_818@Y2021_M03_D17.ZPH.zip
Wind10_818@Y2021_M03_D18.ZPH.zip
Wind10_818@Y2021_M03_D19.ZPH.zip
Wind10_818@Y2021_M03_D20.ZPH.zip
Wind10_818@Y2021_M03_D21.ZPH.zip
Wind10_818@Y2021_M03_D22.ZPH.zip
Wind10_818@Y2021_M03_D23.ZPH.zip
Wind10_818@Y2021_M03_D24.ZPH.zip
Wind10_818@Y2021_M03_D25.ZPH.zip
Wind10_818@Y2021_M03_D26.ZPH.zip
Wind10_818@Y2021_M03_D27.ZPH.zip
Wind10_818@Y2021_M03_D28.ZPH.zip
Wind10_818@Y2021_M03_D29.ZPH.zip
Wind10_818@Y2021_M03_D30.ZPH.zip
Wind10_818@Y2021_M03_D31.ZPH.zip
Wind10_818@Y2021_M04_D01.ZPH.zip
Wind10_818@Y2021_M04_D02.ZPH.zip
Wind10_818@Y2021_M04_D03.ZPH.zip
Wind10_818@Y2021_M04_D04.ZPH.zip
Wind10_818@Y2021_M04_D05.ZPH.zip

Raw wave

TNW_D12_TNWB2_WS187_03-31Mar21_chpr.csv

TNW_D12_TNWB2_WS187_01-30Apr21_chpr.csv

TNW_D12_TNWB2_WS187_01-03May21_chpr.csv

memspec_TNWB2_D12_WS187_2021-03-03--2021-03-31.txt

memspec_TNWB2_D12_WS187_2021-04-01--2021-04-30.txt

memspec_TNWB2_D12_WS187_2021-05-01--2021-05-03.txt

Thelma

Deployment 13

TNWB-2

WS181

LiDAR

Wind_759@Y2021_M05_D03.ZPH.zip
Wind_759@Y2021_M05_D04.ZPH.zip
Wind_759@Y2021_M05_D05.ZPH.zip
Wind_759@Y2021_M05_D06.ZPH.zip
Wind_759@Y2021_M05_D07.ZPH.zip
Wind_759@Y2021_M05_D08.ZPH.zip
Wind_759@Y2021_M05_D09.ZPH.zip
Wind_759@Y2021_M05_D10.ZPH.zip
Wind_759@Y2021_M05_D11.ZPH.zip
Wind_759@Y2021_M05_D12.ZPH.zip
Wind_759@Y2021_M05_D13.ZPH.zip
Wind_759@Y2021_M05_D14.ZPH.zip
Wind_759@Y2021_M05_D15.ZPH.zip
Wind_759@Y2021_M05_D16.ZPH.zip
Wind_759@Y2021_M05_D17.ZPH.zip
Wind_759@Y2021_M05_D18.ZPH.zip
Wind_759@Y2021_M05_D19.ZPH.zip
Wind_759@Y2021_M05_D20.ZPH.zip
Wind_759@Y2021_M05_D21.ZPH.zip
Wind_759@Y2021_M05_D22.ZPH.zip
Wind_759@Y2021_M05_D23.ZPH.zip
Wind_759@Y2021_M05_D24.ZPH.zip
Wind_759@Y2021_M05_D25.ZPH.zip
Wind_759@Y2021_M05_D26.ZPH.zip
Wind_759@Y2021_M05_D27.ZPH.zip
Wind_759@Y2021_M05_D28.ZPH.zip
Wind_759@Y2021_M05_D29.ZPH.zip
Wind_759@Y2021_M05_D30.ZPH.zip
Wind_759@Y2021_M05_D31.ZPH.zip
Wind_759@Y2021_M06_D01.ZPH.zip
Wind_759@Y2021_M06_D02.ZPH.zip
Wind_759@Y2021_M06_D03.ZPH.zip
Wind_759@Y2021_M06_D04.ZPH.zip
Wind_759@Y2021_M06_D05.ZPH.zip
Wind_759@Y2021_M06_D06.ZPH.zip
Wind_759@Y2021_M06_D07.ZPH.zip
Wind_759@Y2021_M06_D08.ZPH.zip
Wind_759@Y2021_M06_D09.ZPH.zip
Wind_759@Y2021_M06_D10.ZPH.zip
Wind_759@Y2021_M06_D11.ZPH.zip
Wind_759@Y2021_M06_D12.ZPH.zip
Wind_759@Y2021_M06_D13.ZPH.zip
Wind_759@Y2021_M06_D14.ZPH.zip
Wind_759@Y2021_M06_D15.ZPH.zip
Wind_759@Y2021_M06_D16.ZPH.zip
Wind_759@Y2021_M06_D17.ZPH.zip

Aquadopp

aquadopp-2021-05-03.txt
aquadopp-2021-05-04.txt
aquadopp-2021-05-05.txt
aquadopp-2021-05-06.txt
aquadopp-2021-05-07.txt
aquadopp-2021-05-08.txt
aquadopp-2021-05-09.txt
aquadopp-2021-05-10.txt
aquadopp-2021-05-11.txt
aquadopp-2021-05-12.txt
aquadopp-2021-05-13.txt
aquadopp-2021-05-14.txt
aquadopp-2021-05-15.txt
aquadopp-2021-05-16.txt
aquadopp-2021-05-17.txt
aquadopp-2021-05-18.txt
aquadopp-2021-05-19.txt
aquadopp-2021-05-20.txt
aquadopp-2021-05-21.txt
aquadopp-2021-05-22.txt
aquadopp-2021-05-23.txt
aquadopp-2021-05-24.txt
aquadopp-2021-05-25.txt
aquadopp-2021-05-26.txt
aquadopp-2021-05-27.txt
aquadopp-2021-05-28.txt
aquadopp-2021-05-29.txt
aquadopp-2021-05-30.txt
aquadopp-2021-05-31.txt
aquadopp-2021-06-01.txt
aquadopp-2021-06-02.txt
aquadopp-2021-06-03.txt
aquadopp-2021-06-04.txt
aquadopp-2021-06-05.txt
aquadopp-2021-06-06.txt
aquadopp-2021-06-07.txt
aquadopp-2021-06-08.txt
aquadopp-2021-06-09.txt
aquadopp-2021-06-10.txt
aquadopp-2021-06-11.txt
aquadopp-2021-06-12.txt
aquadopp-2021-06-13.txt
aquadopp-2021-06-14.txt
aquadopp-2021-06-15.txt
aquadopp-2021-06-16.txt
aquadopp-2021-06-17.txt

Wind_759@Y2021_M06_D18.ZPH.zip	aquadopp-2021-06-18.txt
Wind_759@Y2021_M06_D19.ZPH.zip	aquadopp-2021-06-19.txt
Wind_759@Y2021_M06_D20.ZPH.zip	aquadopp-2021-06-20.txt
Wind10_759@Y2021_M05_D03.ZPH.zip	
Wind10_759@Y2021_M05_D04.ZPH.zip	
Wind10_759@Y2021_M05_D05.ZPH.zip	
Wind10_759@Y2021_M05_D06.ZPH.zip	
Wind10_759@Y2021_M05_D07.ZPH.zip	
Wind10_759@Y2021_M05_D08.ZPH.zip	
Wind10_759@Y2021_M05_D09.ZPH.zip	
Wind10_759@Y2021_M05_D10.ZPH.zip	
Wind10_759@Y2021_M05_D11.ZPH.zip	
Wind10_759@Y2021_M05_D12.ZPH.zip	
Wind10_759@Y2021_M05_D13.ZPH.zip	
Wind10_759@Y2021_M05_D14.ZPH.zip	
Wind10_759@Y2021_M05_D15.ZPH.zip	
Wind10_759@Y2021_M05_D16.ZPH.zip	
Wind10_759@Y2021_M05_D17.ZPH.zip	
Wind10_759@Y2021_M05_D18.ZPH.zip	
Wind10_759@Y2021_M05_D19.ZPH.zip	
Wind10_759@Y2021_M05_D20.ZPH.zip	
Wind10_759@Y2021_M05_D21.ZPH.zip	
Wind10_759@Y2021_M05_D22.ZPH.zip	
Wind10_759@Y2021_M05_D23.ZPH.zip	
Wind10_759@Y2021_M05_D24.ZPH.zip	
Wind10_759@Y2021_M05_D25.ZPH.zip	
Wind10_759@Y2021_M05_D26.ZPH.zip	
Wind10_759@Y2021_M05_D27.ZPH.zip	
Wind10_759@Y2021_M05_D28.ZPH.zip	
Wind10_759@Y2021_M05_D29.ZPH.zip	
Wind10_759@Y2021_M05_D30.ZPH.zip	
Wind10_759@Y2021_M05_D31.ZPH.zip	
Wind10_759@Y2021_M06_D01.ZPH.zip	
Wind10_759@Y2021_M06_D02.ZPH.zip	
Wind10_759@Y2021_M06_D03.ZPH.zip	
Wind10_759@Y2021_M06_D04.ZPH.zip	
Wind10_759@Y2021_M06_D05.ZPH.zip	
Wind10_759@Y2021_M06_D06.ZPH.zip	
Wind10_759@Y2021_M06_D07.ZPH.zip	
Wind10_759@Y2021_M06_D08.ZPH.zip	
Wind10_759@Y2021_M06_D09.ZPH.zip	
Wind10_759@Y2021_M06_D10.ZPH.zip	
Wind10_759@Y2021_M06_D11.ZPH.zip	
Wind10_759@Y2021_M06_D12.ZPH.zip	
Wind10_759@Y2021_M06_D13.ZPH.zip	
Wind10_759@Y2021_M06_D14.ZPH.zip	
Wind10_759@Y2021_M06_D15.ZPH.zip	
Wind10_759@Y2021_M06_D16.ZPH.zip	
Wind10_759@Y2021_M06_D17.ZPH.zip	
Wind10_759@Y2021_M06_D18.ZPH.zip	

Wind10_759@Y2021_M06_D19.ZPH.zip

Wind10_759@Y2021_M06_D20.ZPH.zip

Raw wave

TNW_D13_TNWB2_WS181_03-31May21_chpr.csv

TNW_D13_TNWB2_WS181_01-20Jun21_chpr.csv

memspec_TNWB2_D13_WS181_2021-05-03--2021-05-31.txt

memspec_TNWB2_D13_WS181_2021-06-01--2021-06-20.txt

Thelma

Fugro Norway

Supply of Meteorological and Oceanographic data at

Ten noorden van de Waddeneilanden



Appendix D: Metadata

Overview of datafiles delivered					
Item	Id	Short name	Description	Example filename	Required
Wind	Wi1	Raw data	Raw Zephir data	Wind_843@Y2019_M09_D19.ZPH	
	Wi2	Zephir 10-min data	Zephir 10-min average data	Wind10_843@Y2019_M09_D19.ZPH	
	Wi3	Timeseries U	Timeseries of wind speed and -direction	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceSpeedDirectionStat_IP_01_D.csv	
			WindDir004 to WindDir250m		
			WindGust004, WindSpd004 to Windspeed250m		
			windMaxHor030m to windMaxHor250m		
			windMin_hor030m to windMin_hor250m		
	Wi4	Timeseries TI	Timeseries of TI, veer, shear, inflow	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceTIVeerShearInflow_IP_01_D.csv	
			Inflow angle 030m to 250m		
			Standard deviation 030m to 250m		
		Wind Shear 100-80m, 120-100, 140-120, 160-140, 180-160, 200-180, 250-200, 40-30, 60-40, 80-60, 100-80			
		Wind Veer 100-80m, 120-100, 140-120, 160-140, 180-160, 200-180, 250-200, 40-30, 60-40, 80-60, 100-80			
		turbulence(TI) 030m to 250m			
Wi5	Anemometer data	Wind speed and - direction at 4m	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceSpeedDirectionStat_IP_01_D.csv		
Waves	W1	Raw data	CHPR data, 10min compass-heave-pitch-roll (1024 samples, each 10m)	TNW_D13_TNWB2_WS181_chpr.csv	
	W2	Timeseries	Timeseries of processed wave parameters	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WaveDataStat_IP_01_D.csv	
			hm0, hmax, mdir, sprtp, thhf, thmax, thtp, tm01, tm02		
			hm0a, hm0b, tm02a, hm0b, tm02b, mdira, mdirb		
W3	2D MEM spectra	The directional spectrum is estimated from the directional Fourier components using the Burg Maximum Entropy method (MEM). f, S(f) = Hspec(f), S(f,θ), a1, s2, b1, b2, MDIR1(f), SPR1, hm0 m, Tp s	memspec_TNWA_D1_WS190_2019-06-19--2019-06-30.txt		
Currents	C1	Timeseries	Timeseries of current magnitude and direction	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 CurrentDataStat_IP_01_D.csv	
			AqDir003 to AqDir036		
			AqSpd003 to AqSpd036		
			AqAmp003 to AqAmp036		
Water levels	L1	Timeseries	Timeseries of water pressure ()	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStat_IP_01_D.csv	
	L2	Timeseries	Timeseries of water levels processed (m,LAT)		
Other	O1	Timeseries	Timeseries of other parameters	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStat_IP_01_D.csv	
			Air Pressure, Air Temperature, Humidity, Water temperature		
	O2	Timeseries	Time series buoy position	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 PosData_IP_01_D.csv	
	O3	Time series	Supplementary data	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 SupplementaryData_IP_01_D.csv	

WIND

Item	Value
1. Background	
	This section contains an overview of wind datasets, their description, meta data and processing
	Each dataset description contains the following sections:
	1. General information
	2. Columns: what parameters are in the datafile
	3. Processing: description of processing steps applied to dataset
	4. Quality control: description of quality control procedures applied and meaning of quality flags
2. Overview	
Dataset #1	Raw Zephir data
Dataset #2	10 min average Zephir data
Dataset #3	Timeseries of wind speed and -direction
Dataset #4	Timeseries of TI, veer, shear, inflow
Dataset #5	Anemometer data

Description of datasets

Dataset #1	Raw Zephir data
1. General	
Dataset ID	Wi1
Short name	Raw wind data
Sensor(s)	Zephir Lidar
Description	Raw Zephir wind speed and direction data, binary files
Example filename	Wind_843@Y2019_M09_D19.ZPH
Time interval	1 Hz
2. Columns	
	NOT RELEVANT BECAUSE BINARY DATA
3. Processing	
Digitisation	- digitisation applied: No further digitization, raw Zephir wind speed and direction data. - digitisation resolution: NA
Processing	- data processed from raw Zephir data / other: no processing - filters applied: Internal signal filtering in Lidar - Zephir internal QC filtering applied
4. Quality control	
Tests	- Zephir internal QC filtering applied. See manual
Gaps	See deployment overview template
Flags	Info status flags in 1Hz files Quality flags see Zephir manual

Dataset #2	Zephir 10 minute average data
1. General	
Dataset ID	Wi2
Short name	Zephir 10-min data
Sensor(s)	Zephir Lidar
Description	Zephir wind speed and direction data, 10-min average, binary files
Example filename	Wind10_843@Y2019_M09_D19.ZPH
Time interval	10 min average
2. Columns	
	NOT RELEVANT BECAUSE BINARY DATA
3. Processing	
Digitisation	- digitisation applied: No further digitization, "raw" 10-min average Zephir wind speed and direction data. - digitisation resolution: NA
Processing	- data processed from raw Zephir data / other: no processing

	- filters applied: Internal signal filtering in Lidar
4. Quality control	
Tests	- Zephir internal QC filtering applied. See manual
Gaps	See deployment overview template
Flags	Flags are placed in 10 avg files

Dataset #3	Timeseries of wind speed and -direction
------------	---

1. General	
Dataset ID	Wi3
Short name	Timeseries of wind speed and -direction
Description	Timeseries of processed windspeed and direction, every 10min
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceSpeedDirectionStat_IP_01_D.csv
Time interval	every 10 minutes
Heights at which windspeeds are given	30, 40, 60, 80, 100, 120, 140, 160, 180, 200, 250m

2. Columns	
-------------------	--

	TIMESTAMP (ISO-8601) UTC
	VerticalWindSpeed030m m/s
	VerticalWindSpeed040m m/s
	VerticalWindSpeed060m m/s
	VerticalWindSpeed080m m/s
	VerticalWindSpeed100m m/s
	VerticalWindSpeed120m m/s
	VerticalWindSpeed140m m/s
	VerticalWindSpeed160m m/s
	VerticalWindSpeed180m m/s
	VerticalWindSpeed200m m/s
	VerticalWindSpeed250m m/s
	WindDir004m deg
	WindDir030m deg
	WindDir040m deg
	WindDir060m deg
	WindDir080m deg
	WindDir100m deg
	WindDir120m deg
	WindDir140m deg
	WindDir160m deg
	WindDir180m deg
	WindDir200m deg
	WindDir250m deg
	WindGust004m m/s
	WindSpeed004m m/s
	WindSpeed030m m/s
	WindSpeed040m m/s
	WindSpeed060m m/s
	WindSpeed080m m/s
	WindSpeed100m m/s
	WindSpeed120m m/s
	WindSpeed140m m/s
	WindSpeed160m m/s
	WindSpeed180m m/s
	WindSpeed200m m/s
	WindSpeed250m m/s
	windMax_hor030m m/s
	windMax_hor040m m/s
	windMax_hor060m m/s
	windMax_hor080m m/s
	windMax_hor100m m/s
	windMax_hor120m m/s
	windMax_hor140m m/s
	windMax_hor160m m/s
	windMax_hor180m m/s
	windMax_hor200m m/s
	windMax_hor250m m/s
	windMin_hor030m m/s
	windMin_hor040m m/s
	windMin_hor060m m/s
	windMin_hor080m m/s
	windMin_hor100m m/s
	windMin_hor120m m/s

	windMin_hor140m m/s
	windMin_hor160m m/s
	windMin_hor180m m/s
	windMin_hor200m m/s
	windMin_hor250m m/s
3. Processing	
Digitisation	- digitisation applied: yes for monthly data, no for 24M dataset
	Settings raw data:
	Parameter Min Max nbits Resolution
	Wind speed -1 60 13 0.00744629
	Wind direction -1 361 12 0.0883789
Processing	- data processed from raw Zephir data / wind direction referred to GPS heading/ wind direction checked against independent wind sensor and direction flipped if deviation > 100 deg
	- filters applied: : repeated values, low packets count, min and max
	Wind speed LiDAR [0.001;58]m/s, Wind speed Gill [0.001;35] m/s, Direction (all) [0;360] deg,
	Packet Count [10;40] packets
	180 degree ambiguity check redone for WS170 with offset corrected 4 m Gill wind direction (see Wi5)
	The wind speed measurements are (indirectly) compensated for buoy motion in the way the 10-min values are generated. The method takes into account the position (angle with the vertical) in each 1 Hz wind measurements when calculation the 10-min average.
4. Quality control	
Tests	1. range tests: yes
	2. spikes: yes
	3. data gaps: yes
	4. mean shift: no
	5. acceleration test: no
	6. mean test, variance test: no
	7. count of good points: yes (packet counts per 10 minutes per height)
	8. timecontinuity or parameter variability: yes
	9. parameters acceptable range: yes
	10. 180-degree ambiguity test: yes
	11. manual inspection: yes
	Any other tests? No
Gaps	See meta data template on deployments
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceFilterFlags_IP_01_D.csv
	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceStatusFlags_IP_01_D

Dataset #4	Timeseries of TI, shear, inflow
1. General	
Dataset ID	Wi4
Short name	Timeseries of TI, veer, shear, inflow
Description	Timeseries of processed TI, shear, inflow, every 10min
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceTIVeerShearInflow_IP_01_D.csv
Time interval	every 10 minutes
Heights at which windspeeds are given	Same as wind speed and direction: 30, 40, 60, 80, 100, 120, 140, 160, 180, 200, 250m
2. Columns	
	1: TIMESTAMP (ISO-8601) UTC
	2: InflowAngle030m deg
	3: InflowAngle040m deg
	4: InflowAngle060m deg
	5: InflowAngle080m deg
	6: InflowAngle100m deg
	7: InflowAngle120m deg
	8: InflowAngle140m deg
	9: InflowAngle160m deg
	10: InflowAngle180m deg
	11: InflowAngle200m deg
	12: InflowAngle250m deg
	13: StandardDeviation030m m/s
	14: StandardDeviation040m m/s
	15: StandardDeviation060m m/s
	16: StandardDeviation080m m/s
	17: StandardDeviation100m m/s
	18: StandardDeviation120m m/s
	19: StandardDeviation140m m/s
	20: StandardDeviation160m m/s

Heights at which windspeeds are given	4 m															
2. Columns																
	TIMESTAMP (ISO-8601) UTC VerticalWindSpeed030m m/s VerticalWindSpeed040m m/s VerticalWindSpeed060m m/s VerticalWindSpeed080m m/s VerticalWindSpeed100m m/s VerticalWindSpeed120m m/s VerticalWindSpeed140m m/s VerticalWindSpeed160m m/s VerticalWindSpeed180m m/s VerticalWindSpeed200m m/s VerticalWindSpeed250m m/s WindDir004m deg WindDir030m deg WindDir040m deg WindDir060m deg WindDir080m deg WindDir100m deg WindDir120m deg WindDir140m deg WindDir160m deg WindDir180m deg WindDir200m deg WindDir250m deg WindGust004m m/s WindSpeed004m m/s WindSpeed030m m/s WindSpeed040m m/s WindSpeed060m m/s WindSpeed080m m/s WindSpeed100m m/s WindSpeed120m m/s WindSpeed140m m/s WindSpeed160m m/s WindSpeed180m m/s WindSpeed200m m/s WindSpeed250m m/s															
3. Processing																
Digitisation	- digitisation applied: yes Settings raw data: <table border="1"> <thead> <tr> <th>Parameter</th> <th>Min</th> <th>Max</th> <th>nbits</th> <th>Resolution</th> </tr> </thead> <tbody> <tr> <td>Wind speed/gust</td> <td>-1</td> <td>60</td> <td>13</td> <td>0.00744629</td> </tr> <tr> <td>Wind direction</td> <td>-1</td> <td>361</td> <td>10</td> <td>0.353516</td> </tr> </tbody> </table>	Parameter	Min	Max	nbits	Resolution	Wind speed/gust	-1	60	13	0.00744629	Wind direction	-1	361	10	0.353516
Parameter	Min	Max	nbits	Resolution												
Wind speed/gust	-1	60	13	0.00744629												
Wind direction	-1	361	10	0.353516												
Processing	- data processed from Gill wind sensor - filters applied: repeated values, min, max wind speed Gill [0.001;35] m/s, Direction (all) [0;360] deg, - anemometer data WS170 D9 and D12 reprocessed (-8 degree offset) to be used in additional 180 degree ambiguity check (see Wi3)															
4. Quality control																
Tests	1. range tests: yes 2. spikes: yes 3. data gaps: yes 4. mean shift: no 5. acceleration test: no 6. mean test, variance test: no 7. percent good points: no 8. timecontinuity or parameter variability: yes 9. parameters acceptable range: yes 10. 180-degree ambiguity test: not relevant 11. manual inspection: yes															
Gaps	Flagged with reason in the flag files, see below See also deployment overview template															
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WindResourceFilterFlags_IP_01_D.csv															

Waves

Item	Value
1. Background	
	This section contains an overview of wave datasets and their description and meta data
	Each dataset description contains the following sections:
	1. General information
	2. Columns: what parameters are in the datafile
	3. Processing: description of processing steps applied to dataset
	4. Quality control: description of quality control procedures applied and meaning of quality flags
2. Overview	
Dataset #1	Raw data
Dataset #2	2D spectra
Dataset #3	Timeseries

Description of datasets

Dataset #1	Raw data
1. General	
Dataset ID	Wa1
Short name	Raw data
Sensor	Wavesense
Description	CHPR data, 10min compass-heave-pitch-roll (1024 samples≈17min, each 10m)
Example filename	TNW_D13_TNWB2_WS181_chpr.csv
Time interval	every 10 minutes
Sampling frequency	1 Hz
2. Columns	
	1-1024: compass reading every 1sec, units: degN
	1025-2048 : heave samples every 1sec, units: m
	2049-3072: pitch samples every 1sec, units: sin(deg)
	3073-4096: roll samples every 1sec, units sin(deg)
3. Processing	
Digitisation	- digitisation applied: no = based on raw data
Processing	- based on raw data
	- no heave compensation
	Both lowpass and highpass filters are used on accelerometer data in Fugro bNeptun algorithms.
4. Quality control	
Tests	- Internal QC filtering applied in WaveSense. See manual
Gaps	See deployment overview
Flags	No

Dataset #2	Timeseries
1. General	
Dataset ID	Wa2
Short name	Timeseries
Description	Timeseries of processed wave parameters
Example filename	TNW_20210909_Fugro_MetOcean_Buoys_TNWA_D1_2019-2020_WaveDataStat_IP_01_D.csv
Time interval	every 10 minutes
2. Columns	
	TIMESTAMP (ISO-8601) UTC
	hm0 m
	hm0a m
	hm0b m
	hmax m

	mdir deg																				
	mdira deg																				
	mdirb deg																				
	sprtp deg																				
	thhf deg																				
	thtp deg																				
	thmax s																				
	tm01 s																				
	tm02 s																				
	tm02a s																				
	tm02b s																				
	tp s																				
	tz s																				
3. Processing																					
Digitisation	- digitisation applied: yes, when packing for transmission and storage.																				
	Settings raw data:																				
	<table border="1"><thead><tr><th>Parameter</th><th>Min</th><th>Max</th><th>nbits</th><th>Resolution</th></tr></thead><tbody><tr><td>hm0, hm0a, hm0b, hmax</td><td>-0.1</td><td>20</td><td>10</td><td>0.0196289</td></tr><tr><td>Wave direction</td><td>-1</td><td>361</td><td>9</td><td>0.70731</td></tr><tr><td>wave period</td><td>-1</td><td>25</td><td>8</td><td>0.101563</td></tr></tbody></table>	Parameter	Min	Max	nbits	Resolution	hm0, hm0a, hm0b, hmax	-0.1	20	10	0.0196289	Wave direction	-1	361	9	0.70731	wave period	-1	25	8	0.101563
Parameter	Min	Max	nbits	Resolution																	
hm0, hm0a, hm0b, hmax	-0.1	20	10	0.0196289																	
Wave direction	-1	361	9	0.70731																	
wave period	-1	25	8	0.101563																	
Processing	- processed onboard wave sense, Neptune software																				
4. Quality control																					
Tests	1. range tests: yes																				
	2. spikes: yes																				
	3. data gaps: yes																				
	4. mean shift: no																				
	5. acceleration test: no																				
	6. mean test, variance test: no																				
	7. percent good points: no																				
	8. timecontinuity or parameter variability: no																				
	9. parameters acceptable range: yes																				
	10. 180-degree ambiguity test: no																				
	11. manual inspection: yes																				
	12. operational frequency range test: no																				
	13. incident low frequency and direction: no (swell direction from land)																				
	14. check ratio: no																				
	15. wave parameters acceptable range: yes																				
Gaps	Flagged with reason in the flag files, see below																				
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 WaveDataStatFlags_IP_01_D.csv																				

Dataset #3	
2D MEM spectra	
1. General	
Dataset ID	Wa3
Short name	memspectra
Description	The directional spectrum is estimated from the directional Fourier components using the Burg Maximum Entropy method (MEM).
Example filename	memspec_TNWA_D1_WS190_2019-06-19--2019-06-30.txt
Time interval	every 10 minutes
2. Columns	
	ISSUE TIME
	START TIME
	END TIME
	LOCATION
	direction
	frequency
	matrix rows
	Hm0 m
	Tp s
	Mdir deg
	spectral density
	a1
	b1
	a2
	b2

	hspec
3. Processing	
Digitisation	- digitisation applied: yes, based on raw data, same as Wa1
Processing	-post processed, Neptune software
4. Quality control	
Tests	1. range tests: no 2. spikes: no 3. data gaps:no 4. mean shift: no 5. acceleration test: no 6. mean test, variance test: no 7. percent good points: no 8. timecontinuity or parameter variability: no 9. parameters acceptable range: no 10. 180-degree ambiguity test: no 11. manual inspection: yes 12. operational frequency range test: no 13. incident low frequency and direction: no (swell direction from land) 14. check ratio: no 15. wave parameters acceptable range: yes
Gaps	same as timeseries
Flags	no

Currents

Item	Value
1. Background	
	This section contains an overview of currents datasets and their description and meta data
	Each dataset description contains the following sections:
	1. General information
	2. Columns: what parameters are in the datafile
	3. Processing: description of processing steps applied to dataset
	4. Quality control: description of quality control procedures applied and meaning of quality flags
2. Overview	
Dataset #1	Timeseries data of current speed and direction (at xm below surface)
	AqDir0003 to AqDir0024 (34)
	AqSpd0003 to AqSpd0024 (34)

Description of datasets

Dataset #1	Timeseries data
1. General	
Dataset ID	Cu1
Short name	Timeseries
Sensor(s)	Nortek Aquadopp current profiler
Description	Timeseries of current magnitude and direction, every 10min accross the vertical
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 CurrentDataStat_IP_01_D.csv
Time interval	every 10 minutes
Vertical distance above bottom	depmin=22m; cellsize=1m; nCells=24 (depending on depth)
2. Columns	
	TIMESTAMP (ISO-8601) UTC
	AqDir003 deg
	AqDir004 deg
	AqDir005 deg
	AqDir006 deg
	AqDir007 deg
	AqDir008 deg
	AqDir009 deg
	AqDir010 deg
	etc
	AqDir036 deg
	AqSpd003 cm/s
	AqSpd004 cm/s
	AqSpd005 cm/s
	AqSpd006 cm/s
	AqSpd007 cm/s
	AqSpd008 cm/s
	AqSpd009 cm/s
	AqSpd010 cm/s
	etc
	AqSpd036 cm/s
	AqAmp003 int
	AqAmp004 int
	AqAmp005 int
	AqAmp006 int
	AqAmp007 int
	AqAmp008 int
	AqAmp009 int
	AqAmp010 int
	etc
	AqAmp036 int
3. Processing	
Digitisation	- digitisation applied: yes, when packing for transmission and storage
	Settings raw data:
	Parameter Min Max nbits Resolution
	Current speed (cm/s) -1 300 10 0.293945
	Current direction -1 361 11 0.176758

	AqAmp (integer) 0 128 7 1
Processing	- raw data sampling from acoustic doppler profiler - converted to velocity vectors by Aquadopp firmware - quality checked based on recorded signal strength: AqAmp (dB), minimum pass 30 dB
4. Quality control	
Tests	1. range tests: yes 2. spikes: yes 3. data gaps: yes 4. mean shift: no 5. acceleration test: no 6. mean test, variance test: no 7. percent good points: quality checked against signal strength 8. timecontinuity or parameter variability: yes 9. parameters acceptable range: yes 10. 180-degree ambiguity test: not relevant 11. manual inspection: yes
Gaps	Flagged with reason in the flag files, see below
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 CurrentDataStatFlags_IP_01_D.csv

Water levels

Item	Value
1. Background	
	This section contains an overview of waterlevel datasets and their description and meta data
	Each dataset description contains the following sections:
	1. General information
	2. Columns: what parameters are in the datafile
	3. Processing: description of processing steps applied to dataset
	4. Quality control: description of quality controle procedures applied and meaning of quality flags
2. Overview	
Dataset #1	Timeseries data of water pressure at the bottom (pressure sensor)
Dataset #2	Timeseries of water level processed from water pressure

Description of datasets

Dataset #1	Waterpressure data (raw)										
1. General											
Dataset ID	L1										
Short name	Timeseries raw data										
Sensor(s)	Thelma										
Description	Timeseries of water pressure at bottom, every 10min										
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStat_IP_01_D.csv										
Time interval	every 10 minutes										
Vertical distance above bottom	Pressure valid at sensor height above bottom, sensor height above bottom is: 1 m										
2. Columns											
	TIMESTAMP (ISO-8601) UTC										
	AirHumidity %										
	AirPressure hPa										
	AirTemperature C										
	BottomTemperature degC										
	WaterPressure dbar										
	WaterTemp0001 degC										
	WaterLevel m										
	WaterLevel_LAT m										
3. Processing											
Digitisation	- digitisation applied: yes, when packing for transmission and storage										
	Settings raw data:										
	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Min</th> <th>Max</th> <th>nbits</th> <th>Resolution</th> </tr> </thead> <tbody> <tr> <td>Water pressure</td> <td>0</td> <td>160</td> <td>17</td> <td>0.0012207</td> </tr> </tbody> </table>	Parameter	Min	Max	nbits	Resolution	Water pressure	0	160	17	0.0012207
Parameter	Min	Max	nbits	Resolution							
Water pressure	0	160	17	0.0012207							
Processing	- raw data sampling from bottom mounted pressure sensor - to be converted to water depth and waterlevel above mean sea level										
4. Quality control											
Tests	<ol style="list-style-type: none"> range tests: yes spikes: yes data gaps: yes mean shift: no acceleration test: no mean test, variance test: no percent good points: no timecontinuity or parameter variability: yes parameters acceptable range: yes 180-degree ambiguity test: not relevant manual inspection: yes 										
Gaps	Flagged with reason in the flag files, see below										
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStatFlags_IP_01_D.csv										

Dataset #2	Waterlevel data
------------	-----------------

1. General	
Dataset ID	L2
Short name	Timeseries of water level (m+MSL, m+CD)
Sensor(s)	
Description	Timeseries of water level, every 10min
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStat_IP_01_D.csv
Time interval	every 10 minutes
Units and reference levels	Waterlevels given in m wrt MSL and CD
2. Columns	
	TIMESTAMP (ISO-8601) UTC
	AirHumidity %
	AirPressure hPa
	AirTemperature C
	BottomTemperature degC
	WaterPressure dbar
	WaterTemp0001 degC
	WaterDepth m
	WaterLevel_LAT m
3. Processing	
Digitisation	- digitisation applied: yes, when packing for transmission and storage
	Settings raw data:
	Parameter Min Max nbits Resolution
	Calculated from water pressure
Processing	- converted from pressure sensor data corrected for air pressure, $\rho_{\text{water}}=1025$, ref level=xxm, $p=\rho \cdot g \cdot h$, water level (LAT) = h + ref level
	ref levels in data report
	MSL-LAT difference is ca 1 m at TNW.
4. Quality control	
Tests	1. range tests: yes
	2. spikes: yes
	3. data gaps: yes
	4. mean shift: no
	5. acceleration test: no
	6. mean test, variance test: no
	7. percent good points: no
	8. timecontinuity or parameter variability: yes
	9. parameters acceptable range: yes
	10. 180-degree ambiguity test: not relevant
	11. manual inspection: yes
Gaps	Flagged with reason in the flag files, see below
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStatFlags_IP_01_D.csv

Other

Item	Value
1. Background	
	This section contains an overview of other datasets and their description and meta data
	Each dataset description contains the following sections:
	1. General information
	2. Columns: what parameters are in the datafile
	3. Processing: description of processing steps applied to dataset
	4. Quality control: description of quality control procedures applied and meaning of quality flags
2. Overview	
Dataset #1	Timeseries data of various parameters
Dataset #2	Timeseries data for buoy position
Dataset #3	Timeseries for supplementary data

Description of datasets

Dataset #1	Timeseries of various parameters
1. General	
Dataset ID	O1
Short name	Timeseries various parameters
Sensor(s)	Vaisala Air Pressure sensor PTB, Vaisala Air temperature and humidity sensor HMP, Water temperature from Nortek Aquadopp current profiler
Description	Timeseries of various parameters, every 10min
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStat_IP_01_D.csv
Time interval	every 10 minutes
2. Columns	
	TIMESTAMP (ISO-8601) UTC
	AirHumidity %
	AirPressure hPa
	AirTemperature C
	BottomTemperature degC
	WaterPressure dbar
	WaterTemp0001 degC
	WaterLevel m
	WaterLevel_LAT m
3. Processing	
Digitisation	- digitisation applied: yes, when packing for transmission and storage
	Settings raw data:
	Parameter Min Max nbits Resolution
	Air humidity 0 110 10 0.107422
	Air pressure 900 1100 11 0.0976563
	Air temperature -15 40 10 0.0537109
	Water temperature -1 60 13 0.00744629
Processing	- raw data sampling from various sensors
4. Quality control	
Tests	1. range tests: yes
	2. spikes: yes
	3. data gaps: yes
	4. mean shift: not relevant
	5. acceleration test: not relevant
	6. mean test, variance test: not relevant
	7. percent good points: no
	8. timecontinuity or parameter variability: yes
	9. parameters acceptable range: yes
	10. 180-degree ambiguity test: not relevant
	11. manual inspection: yes
Gaps	Flagged with reason in the flag files, see below
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 MetDataStatFlags_IP_01_D.csv

Dataset #2		Position data			
1. General					
Dataset ID	O2				
Short name	Timeseries data of buoy position				
Sensor(s)	GPS (Irridium and Septentrio)				
Description	Timeseries of position, every 10min				
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 PosData_IP_01_D.csv				
Time interval	every 10 minutes				
Units and reference levels	...				
2. Columns					
	TIMESTAMP (ISO-8601) UTC				
	irLatitude deg				
	irLongitude deg				
	spLatitude deg				
	spLongitude deg				
	irLatitude deg flag				
	irLongitude deg flag				
	spLatitude deg flag				
	spLongitude deg flag				
3. Processing					
Digitisation	- digitisation applied: yes, when packing for transmission and storage				
	Settings raw data:				
	Parameter	Min	Max	nbits	Resolution
	Latitude	0	80	21	3.8147e-05
	Longitude	-100	40	22	3.33786e-05
Processing	No				
4. Quality control					
Tests	1. range tests: yes				
	2. spikes: no				
	3. data gaps: yes				
	4. mean shift: no				
	5. acceleration test: no				
	6. mean test, variance test: no				
	7. percent good points: no				
	8. timecontinuity or parameter variability: yes				
	9. parameters acceptable range: no				
	10. 180-degree ambiguity test: not relevant				
	11. manual inspection: yes				
Gaps					
Flags	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 PosData_IP_01_D.csv				

Dataset #3		Timeseries of supplementary parameters	
1. General			
Dataset ID	O3		
Short name	Timeseries supplementary parameters (accuracy not known)		
Sensor(s)	Lidar met station, Lidar and Thelma sensor and modem		
Description	Timeseries of supplementary parameters, every 10min		
Example filename	TNW_20210909_Fugro_MetOcean Buoys TNWA D1 2019-2020 SupplementaryData_IP_01_D.csv		
Time interval	every 10 minutes		
2. Columns			
	TIMESTAMP (ISO-8601) UTC		
	thSNR dB		
	thSNR dB flag		
	thTBRid unknown		
	thTBRid unknown flag		
	thTBRtemperature degC		
	thTBRtemperature degC flag		
	thTilt deg		
	thTilt deg flag		
	AirPressure_lidar hPa		
	AirPressure_lidar hPa flag		
	AirTemp_lidar C		
	AirTemp_lidar C flag		

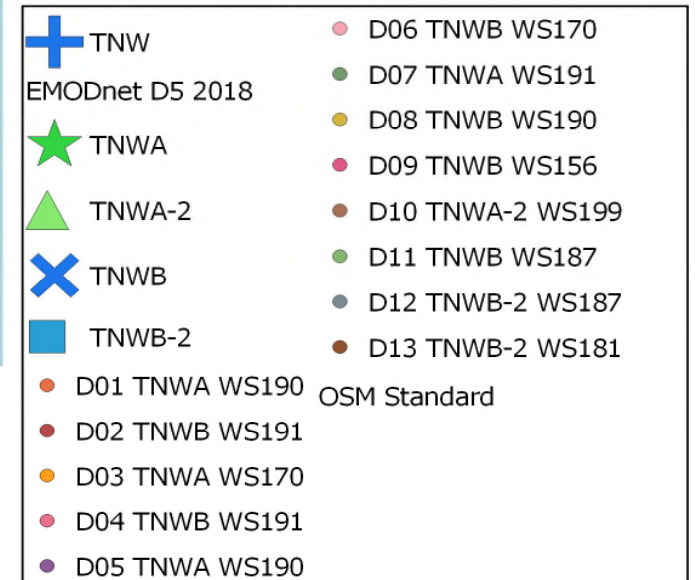
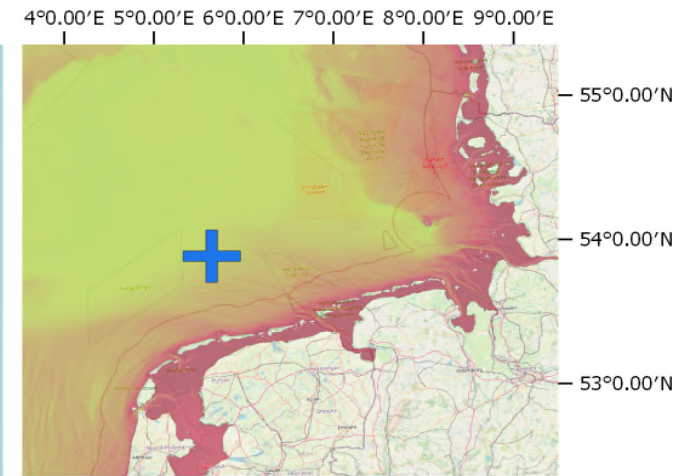
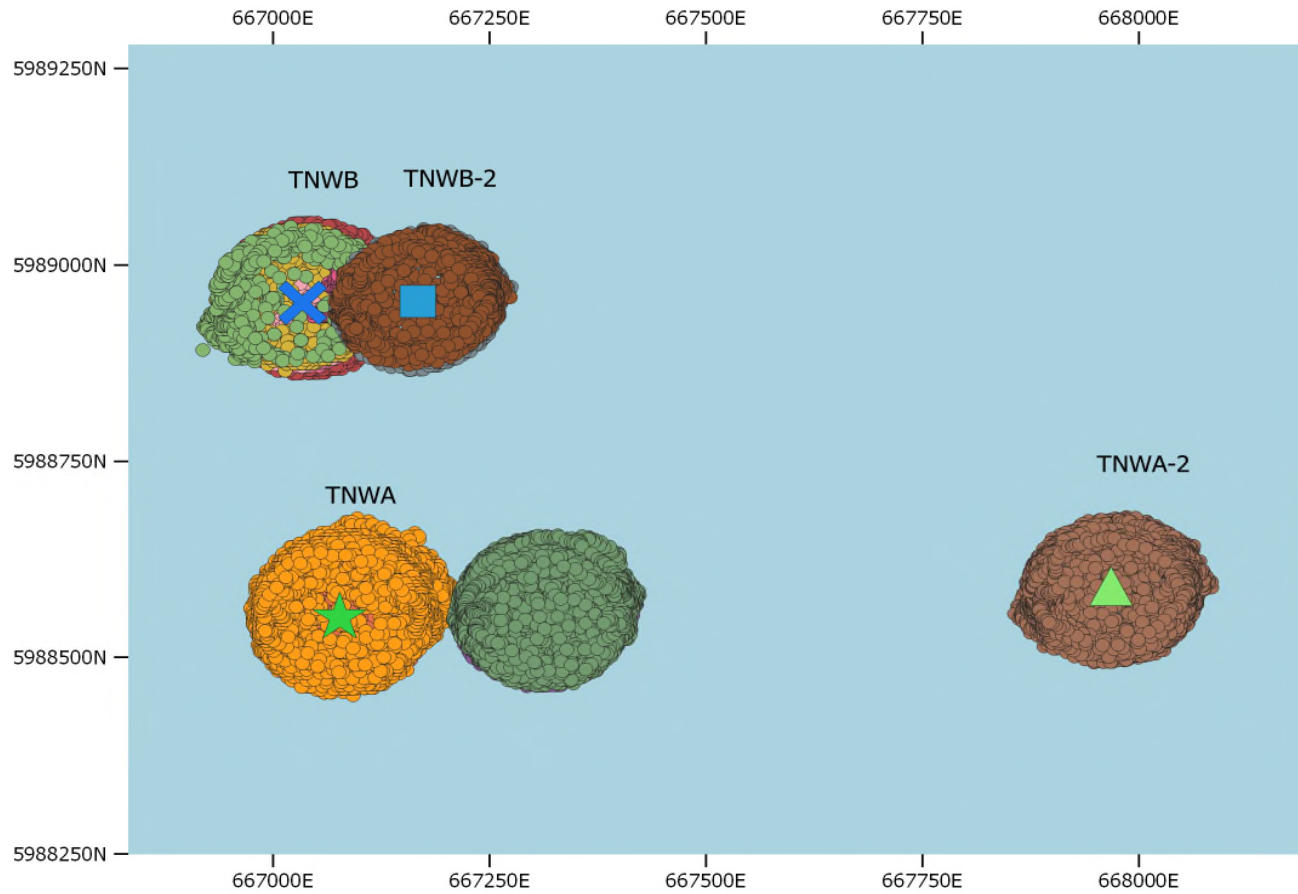
RVO - Ten noorden van de Waddeneilanden

Metocean campaign 2019-2021

Meta Data on the various Buoy deployments

Version	Date	Author	Revision history Notes
R1_01	30.09.2021	IP	First draft
R2_02	14.12.2021	IP	Updated draft
F	03.01.2021	IP	Final

Map of buoy deployments for TNW



Overview of buoy deployments for TNW

Buoy Id	Id	Buoy Id	Location	longitude	latitude	easting	northing	~depth (MSL)	Deployment date	Recovery date
WS190	D01	WS190	TNWA	5° 33.014' E	54° 01.089' N	667077	5988551	36	19 jun 2019	22 jan 2020
	D05	WS190	TNWA	5° 33.014' E	54° 01.089' N	667077	5988551	36	11 apr 2020	22 jul 2020
	D08	WS190	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	14 sep 2020	25 okt 2020
WS191	D02	WS191	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	19 jun 2019	22 jan 2020
	D04	WS191	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	11 apr 2020	24 jun 2020
	D07	WS191	TNWA	5° 33.014' E	54° 01.089' N	667077	5988551	36	22 jul 2020	30 des 2020
WS170	D03	WS170	TNWA	5° 33.014' E	54° 01.089' N	667077	5988551	36	22 jan 2020	11 apr 2020
	D06	WS170	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	24 jun 2020	14 sep 2020
WS156	D09	WS156	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	10 nov 2020	25 jan 2021
WS199	D10	WS199	TNWA-2	5° 33.8302' E	54° 01.0932' N	667968	5988591	38	16 jan 2021	20 jun 2021
WS187	D11	WS187	TNWB	5° 32.988' E	54° 01.306' N	667034	5988952	36	25 jan 2021	15 feb 2021
	D12	WS187	TNWB-2	5° 33.1098' E	54° 01.3044' N	667167	5988954	37	03 mar 2021	03 mai 2021
WS181	D13	WS181	TNWB-2	5° 33.1098' E	54° 01.3044' N	667167	5988954	37	03 mai 2021	20 jun 2021

WS190

Item	Value
1. Background	
Buoy ID	WS190
Serial Number	WS190
Design Version	2.2
2. Description	
Description	Primary buoy for TNWA location, validation certified by DNVGL
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10129033-R-10-B_WS190_20191128.pdf, 10129033-R-10, Rev. B, 2019-11-28, Frøya, Norway, 2019-04-02 to 2019-05-09
Zephyr	ZX843M DNV GL Verification report 22.05.19.pdf, 10108274-R-38, Rev. A, 2019-05-22, Pershore, UK between 2018-12-11 and 2019-01-11
Wavesense	wavesense test and calibration certificate 366.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Aquadopp_AQP9721.pdf
Vaisala humidity & temperature	VaisalaHMP155_P1730331.pdf
Vaisala air pressure	VaisalaPTB330_P4120802.pdf
Gill Windsonic	Gill_M_18320036.pdf
4. Deployments	
Deployment #1	D01
Deployment #2	D05
Deployment #3	D08

Deployments

Deployment #1	
1. General	
Deployment ID	D01
Location name	TNWA
Longitude	5° 33.014' E
Latitude	54° 01.089' N
Depth	36m
Deployment date	19 jun 2019
Recovery date	22 jan 2020
2. Sensors	
LiDAR	ZX843M, Firmware 2.2020
Wave sensor	Wavesense 366
Current profiler	Nortek Aquadopp AQP 9721 /AQD 15088
Air Pressure sensor	Vaisala PTB P4120802
Air temperature and humidity sensor	Vaisala HMP P1730331
Wind sensor (in mast)	Gill Windsonic 18320036
Water pressure sensor	Thelma 562
3. History	
	New buoy. 1st deployment June 2019.
4. Issues / failures	
Water level	The water level sensor malfunctioned upon deployment. There is no water level data for this deployment

LiDAR unit	In December 2019 the communication between the LiDAR and the buoy data logger was functioning intermittently with frequent data gaps. The LiDAR unit stopped on 28th December 2020 due to wedge rotation failure.

Deployment #2	
1. General	
Deployment ID	D05
Location name	TNWA
Longitude	5° 33.014' E
Latitude	54° 01.089' N
Depth	36m
Deployment date	11 apr 2020
Recovery date	22 jul 2020
2. Sensors	
LiDAR	ZX843M, Firmware 2.2020
Wave sensor	Wavesense 366
Current profiler	Nortek Aquadopp AQP 9721 /AQD 15088
Air Pressure sensor	Vaisala PTB P4120802
Air temperature and humidity sensor	Vaisala HMP P1730331
Wind sensor (in mast)	Gill Windsonic 18320036
Water pressure sensor	Thelma 562
3. History	
Service after 1st deployment	New buoy. 1st deployment June 2019.
	Fully serviced and refuelled after D01.
	The LiDAR unit was sent to ZX LiDARs for repairs.
	Redeployed fully functional.
4. Issues / failures	
LiDAR unit	The LiDAR unit stopped working on 15th July 2020 due to a laser fault.
Aquadopp	During deployment D05, a "step" at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3.

Deployment #3	
1. General	
Deployment ID	D08
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	14 sep 2020
Recovery date	25 okt 2020
2. Sensors	
LiDAR	ZX843M, Firmware 2.2020
Wave sensor	Wavesense 366
Current profiler	Nortek Aquadopp AQP 9721 /AQD 15088
Air Pressure sensor	Vaisala PTB P4120802
Air temperature and humidity sensor	Vaisala HMP P1730331
Wind sensor (in mast)	Gill Windsonic 18320036
Water pressure sensor	Thelma 562
3. History	
Service after 1st and 2nd deployment	New buoy. 1st deployment June 2019.
	Fully serviced and refuelled after D01.
	The LiDAR unit was sent to ZX LiDARs for repairs.
	Redeployed fully functional.
	Fully serviced and refuelled after D01.
	The LiDAR unit was sent to ZX LiDARs for repairs.

	Redeployed fully functional.
4. Issues / failures	
Drifting	WS190 began to drift during a storm at 11:20 UTC on 25th of October 2020, and was recovered with heavy damage during an emergency operation 12 hours later.

WS191

Item	Value
1. Background	
Buoy ID	WS191
Serial Number	WS191
Design Version	2.2
2. Description	
Description	Primary buoy for TNWB location, validation certified by DNVGL
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10129033-R-11-B_WS191_20191128.pdf, 10129033-R-11, Rev. B, 2019-11-28, Frøya, Norway, 2019-04-12 to 2019-05-16
Zephyr	ZX862M DNV GL Verification report 22.05.19.pdf,10108274-R-37, Rev. A, 2019-05-22, Pershore, UK between 2019-02-06 and 2019-02-26.
Wavesense	Wavesense test and calibration certificate 371.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Aquadopp_AQP9744.pdf
Vaisala humidity & temperature	Vaisala_HMP_P4050599.pdf
Vaisala air pressure	Vaisala_PTB_P4120800.pdf
Gill Windsonic	Gill_19060137.pdf
4. Deployments	
Deployment #1	D02
Deployment #2	D04
Deployment #3	D07

Deployments

Deployment #1	
1. General	
Deployment ID	D02
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	19 jun 2019
Recovery date	22 jan 2020
2. Sensors	
LiDAR	ZX862M, Firmware 2.2020
Wave sensor	Wavesense 371
Current profiler	Nortek Aquadopp AQP 9744/AQD 14707
Air Pressure sensor	Vaisala PTB P4120800
Air temperature and humidity sensor	Vaisala HMP P4050599
Wind sensor (in mast)	Gill Windsonic 19060137
Water pressure sensor	Thelma 926
3. History	
	New buoy. 1st deployment .
4. Issues / failures	
LiDAR buoy communication	In October 2019, the communication between the LiDAR unit and buoy data logger worked intermittently. Data was stored internally in the LiDAR and could be downloaded at service in January 2020.

LiDAR unit	In December 2019, the LiDAR unit worked intermittently until it stopped on the 22nd December 2019.
Aquadopp	During deployment D02, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3.
Water level	Water level sensor moved to a deeper position on 15th September 2020

Deployment #2	
1. General	
Deployment ID	D04
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	11 apr 2020
Recovery date	24 jun 2020
2. Sensors	
LiDAR	ZX862M, Firmware 2.2020
Wave sensor	Wavesense 371
Current profiler	Nortek Aquadopp AQP 9744/AQD 14707
Air Pressure sensor	Vaisala PTB P4120800
Air temperature and humidity sensor	Vaisala HMP P4050599
Wind sensor (in mast)	Gill Windsonic 19060137
Water pressure sensor	Thelma 926
3. History	
Service after 1st deployment	Full service and refuelling after D02. LiDAR unit checked remotely by ZX LiDARs. No faults found. Buoy redeployed fully functional.
4. Issues / failures	
Aquadopp	During deployment D04, a “step” at 10-11 m to higher mean velocities was discovered in the mean vertical profile. This appears to be caused by interference at that level affecting beam 3.

Deployment #3	
1. General	
Deployment ID	D07
Location name	TNWA
Longitude	5° 33.014' E
Latitude	54° 01.089' N
Depth	36m
Deployment date	22 jul 2020
Recovery date	30 des 2020
2. Sensors	
LiDAR	ZX862M, Firmware 2.2020
Wave sensor	Wavesense 371
Current profiler	Nortek Aquadopp AQP 9744/AQD 14707
Air Pressure sensor	Vaisala PTB P4120800
Air temperature and humidity sensor	Vaisala HMP P4050599
Wind sensor (in mast)	Gill Windsonic 19060137
Water pressure sensor	Thelma 926
3. History	
Service after 1st and 2nd deployment	New buoy. 1st deployment june 2019.. Full service and refuelling after D02. LiDAR unit checked remotely by ZX LiDARs. No faults found. Full service and refuelling after D04.

	Buoy redeployed fully functional.
4. Issues / failures	
Drifting	WS191 began to drift during a storm at 11:30 UTC on 30th of December 2020, and was recovered with heavy damage during an emergency operation 31st December 2020.
DGPS system	The DGPS system suffered intermittent outages in November 2020 and stopped working on 4th December 2020

WS170

Item	Value
1. Background	
Buoy ID	WS170
Serial Number	WS170
Design Version	2.1
2. Description	
Description	Spare buoy for TNW and HKW (see report) projects, in-situ verified against WS188, validation certified by DNVGL in August 2019, post-deployment validated against LEG platform in May 2021
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10166838-R-1-A_WS170vsWS187_WS170vsWS188_20190829.pdf, 10166838-R-1, Rev. A, 2019-08-29. In situ HKW site 2019-06-16 to 2019-08-11
Zephyr	DNV GL report, ZP585_Performance_verification_10108274-R-0026-A.pdf, 10108274-R-0026, Rev. A, 2019-02-20, Pershore, UK between 2019-01-06 and 2019-02-06
Wavesense	wavesense_336.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Nortek_AQP8644.pdf
Vaisala humidity & temperature	vaisalaHMP155_P4050602.pdf
Vaisala air pressure	vaisalaPTB330_M5220804.pdf
Gill Windsonic	gillM_18320033.pdf
4. Deployments	
Deployment #1	D03
Deployment #2	D06
Deployment #3	

Deployments

Deployment #1	
1. General	
Deployment ID	D03
Location name	TNWA
Longitude	5° 33.014' E
Latitude	54° 01.089' N
Depth	36m
Deployment date	22 jan 2020
Recovery date	11 apr 2020
2. Sensors	
LiDAR	ZP585M, Firmware 2.2020
Wave sensor	Wavesense 336
Current profiler	Nortek Aquadopp AQP 8644 /AQD 13597
Air Pressure sensor	Vaisala PTB M5220804
Air temperature and humidity sensor	Vaisala HMP P4050602 2018
Wind sensor (in mast)	Gill Windsonic 18320033
Water pressure sensor	Thelma 75
3. History	
	Shared spare buoy for both TNW and HKW projects.
	In situ validated and deployed at HKW in 2019.
	Fully serviced and functional before deployment at TNW.

4. Issues / failures	
Water level sensor	No water level sensor deployed.
Main mast / DGPS system	SWLB WS170 suffered damage to the main mast during a storm on 9th 2020 resulting in an offset in the DGPS heading data making DPGS heading unusable. The LiDAR unit was unaffected.
Mast with Gill wind sensor	Misalignment of mast leading to approx. 8° offset in 4m wind direction. No effect on LiDAR wind directions.
Fuel cells	3 fuel cells stopped working after the storm leading to decreased power availability.
LiDAR unit	The LiDAR unit stopped on 27th March 2020 due to lack of power.

Deployment #2	
1. General	
Deployment ID	D06
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	24 jun 2020
Recovery date	14 sep 2020
2. Sensors	
LiDAR	ZP585M, Firmware 2.2020
Wave sensor	Wavesense 336
Current profiler	Nortek Aquadopp AQP 8644 /AQD 13597
Air Pressure sensor	Vaisala PTB M5220804
Air temperature and humidity sensor	Vaisala HMP P4050602 2018
Wind sensor (in mast)	Gill Windsonic 18320033
Water pressure sensor	Thelma 75
3. History	
	After D03, Regular maintenance and refuelling. Replacement of fuel cells.Replacement of air temperature and humidity probe.
	Mast misalignment present affecting DGPS system (data unusable) and Gill wind direction.
4. Issues / failures	
Mast with wind sensor	Misalignment of mast leading to approx. 8° offset in 4m wind direction. No effect on LiDAR wind directions.

WS156

Item	Value
1. Background	
Buoy ID	WS156
Serial Number	WS156
Design Version	2
2. Description	
Description	Upgraded single-hull spare buoy without DGPS
3. Documentation	
SW Wind Lidar buoy	'DNV GL report, GLGH-4257 13 10378 266-R-0005-E(WS156).pdf, GLGH-4257 13 10378-R-0005, Rev. E, 2016-04-12.
Zephir	'DNV GL report, ZP501_Performance_verification_10108274-R-0026-A.pdf, 10159431-R-19, Rev. A, 2019-09-30, Pershore, UK between 2019-08-09 until 2019-09-02
Wavesense	wavesense_279.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Nortek_AQP9721.pdf
Vaisala humidity & temperature	Vaisala_HMP_M1750933.pdf
Vaisala air pressure	Vaisala_PTB_K2740014.pdf
Gill Windsonic	Gill_17500028.pdf
4. Deployments	
Deployment #1	D09
Deployment #2	
Deployment #3	

Deployments

Deployment #1	
1. General	
Deployment ID	D09
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	10 nov 2020
Recovery date	25 jan 2021
2. Sensors	
LiDAR	ZX501M, Firmware 2.2020
Wave sensor	Wavesense 279
Current profiler	Nortek Aquadopp AQP 9721/AQD 15088
Air Pressure sensor	Vaisala PTB K2740014
Air temperature and humidity sensor	Vaisala HMP M1750933
Wind sensor (in mast)	Gill Windsonic 17500028
Water pressure sensor	
3. History	
	Spare buoy without DGPS.
	Used in HKZ and HKN campaigns.
	Fully serviced before deployment.
4. Issues / failures	
Water level sensor	No water level sensor deployed.

Iridium antenna	The iridium antenna system failed and no position data are available.
Aquadopp	The Aquadopp current meter failed on 24th November 2020 .

WS199

Item	Value
1. Background	
Buoy ID	WS199
Serial Number	WS199
Design Version	2.2
2. Description	
Description	Primary buoy for TNWA-2 location, swapped in for WS190, validation certified by DNVGL
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10189146-R-3-B_WS199_20210112.pdf, 10189146-R-3, Rev. B, 2021-01-12, Frøya, Norway, 2019-11-19 to 2019-12-18
Zephyr	ZX843M DNV GL Verification report 22.05.19.pdf, 10108274-R-38, Rev. A, 2019-05-22, Pershore, UK between 2018-12-11 and 2019-01-11
Wavesense	wavesense test and calibration certificate 387.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Nortek_AQP8492.pdf
Vaisala humidity & temperature	Vaisala HMP155 S4310172.pdf
Vaisala air pressure	Vaisala PTB330 R1820357.pdf
Gill Windsonic	Gill M 20120006.pdf
4. Deployments	
Deployment #1	D10
Deployment #2	
Deployment #3	

Deployments

Deployment #1	
1. General	
Deployment ID	D10
Location name	TNWA-2
Longitude	5° 33.8302' E
Latitude	54° 01.0932' N
Depth	38m
Deployment date	16 jan 2021
Recovery date	20 jun 2021
2. Sensors	
LiDAR	ZX898M, Firmware 2.2020
Wave sensor	Wavesense 387
Current profiler	Nortek Aquadopp AQP8492 /AQD13914
Air Pressure sensor	Vaisala PTB R1820357
Air temperature and humidity sensor	Vaisala HMP S4310172
Wind sensor (in mast)	Gill Windsonic 20120006
Water pressure sensor	Thelma 91096
3. History	
	New buoy. 1st deployment.
4. Issues / failures	

WS187

Item	Value
1. Background	
Buoy ID	WS187
Serial Number	WS187
Design Version	2.2
2. Description	
Description	Primary buoy for HKW location, validation certified by DNVGL, spare buoy for TNW in 2021
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10129033-R-6-E_WS187_20191128.pdf, 10129033-R-6, Rev. E, 2019-11-28, Frøya, Norway, between 2019-01-04 to 2019-01-21
Zephyr	ZX818 DNV GL Verification report.pdf, 10108274-R-0016, Rev. A, 2018-10-30 Persore, UK between 2018-09-28 and 2018-10-16
Wavesense	Wavesense test and calibration certificate 370.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Nortek_AQP9363.pdf
Vaisala humidity & temperature	Vaisala_HMP155_P1730335.pdf
Vaisala air pressure	Vaisala_PTB330_N5230736.pdf
Gill Windsonic	Gill_Windsonic_18320062.pdf
4. Deployments	
Deployment #1	D11
Deployment #2	D12
Deployment #3	

Deployments

Deployment #1	
1. General	
Deployment ID	D11
Location name	TNWB
Longitude	5° 32.988' E
Latitude	54° 01.306' N
Depth	36m
Deployment date	25 jan 2021
Recovery date	15 feb 2021
2. Sensors	
LiDAR	ZX818M, Firmware 2.2020
Wave sensor	Wavesense 370
Current profiler	Nortek Aquadopp AQP 9363/AQD 14604
Air Pressure sensor	Vaisala PTB N5230736
Air temperature and humidity sensor	Vaisala HMP P1730335
Wind sensor (in mast)	Gill Windsonic 18320062
Water pressure sensor	Thelma 921
3. History	
	Fully serviced after HKW campaign end before deployment
4. Issues / failures	

Drifting	SWLB WS187 moored at TNWB started drifting around 19:00 UTC on 15th of February 2021 after likely contact with a vessel and was recovered on 16th of February 2021. Damage was mostly confined to the instruments on the mast top carriers.
DGPS system	LiDAR wind direction for D11, WS187, uses compass as heading source due to outages of the DGPS system during the deployment.
Water level sensor	No water level sensor deployed.

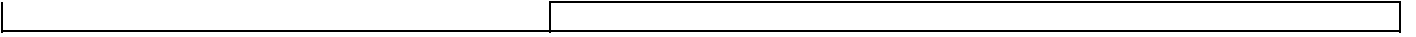
Deployment #2	
1. General	
Deployment ID	D12
Location name	TNWB-2
Longitude	5° 33.1098' E
Latitude	54° 01.3044' N
Depth	37m
Deployment date	03 mar 2021
Recovery date	03 mai 2021
2. Sensors	
LiDAR	ZX818M, Firmware 2.2020
Wave sensor	Wavesense 370
Current profiler	Nortek Aquadopp AQP 9363/AQD 14604
Air Pressure sensor	Vaisala PTB N5230739
Air temperature and humidity sensor	Vaisala HMP P1730334
Wind sensor (in mast)	Gill Windsonic 18320035
Water pressure sensor	Thelma 921
3. History	
Service after 1st deployment	Mast top carriers including sensors replace during service after D11 .
	Redeployed fully serviced and functional.
4. Issues / failures	
Aquadopp current meter	Current meter failed on 06th March 2021
LiDAR unit	The LiDAR unit stopped working on 05th April 2021 after loss of communications between the LiDAR unit and geni.
Water level sensor	No water level sensor deployed.

WS181

Item	Value
1. Background	
Buoy ID	WS181
Serial Number	WS181
Design Version	2.2
2. Description	
Description	Primary buoy for TNWB-2 location, swapped in for WS191 and WS187, validation certified by DNVGL
3. Documentation	
SW Wind Lidar buoy	DNV GL report, 10281716-R-2-A_WS181_20210225.pdf, 10281716-R-2, Rev. A, 2021-02-25, Frøya, Norway, between 2021-01-15 and 2021-02-04
Zephyr	ZX759 DNV GL Verification report 2021-02-17.pdf, 10284581-R-1, Rev. A, 2021-02-17, Pershore, UK between 2020-11-12 and 2020-11-27.
Wavesense	wavesense test and calibration certificate 354.pdf Wavesense 3 wave data acquisition principles.pdf
Aquadopp	Nortek_AQP9368.pdf
Vaisala humidity & temperature	Vaisala_S4310171.pdf
Vaisala air pressure	Vaisala_PTB330_N5230741.pdf
Gill Windsonic	Gill_18070007.pdf
4. Deployments	
Deployment #1	D13
Deployment #2	
Deployment #3	

Deployments

Deployment #1	
1. General	
Deployment ID	D13
Location name	TNWB-2
Longitude	5° 33.1098' E
Latitude	54° 01.3044' N
Depth	37m
Deployment date	03 mai 2021
Recovery date	20 jun 2021
2. Sensors	
LiDAR	ZX759M, Firmware 2.2020
Wave sensor	Wavesense 354
Current profiler	Nortek Aquadopp AQP 9368/AQD 14596
Air Pressure sensor	Vaisala PTB N5230741
Air temperature and humidity sensor	Vaisala HMP S4310171
Wind sensor (in mast)	Gill Windsonic 18070007
Water pressure sensor	Thelma 1100
3. History	
	Fully serviced and newly pre-deployment validated SWLB
4. Issues / failures	
LiDAR unit	The highest LiDAR height for D13 is 240 m.
Water level sensor	No water level sensor deployed.



Appendix E: Data gap tables

Data gap tables

E.1 Deployment 1

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
19.06.2019 05:00	10 min	250m
19.06.2019 05:10	30 min	180-250m
19.06.2019 18:00	10 min	250m
19.06.2019 18:10	10 min	200-250m
19.06.2019 18:20	10 min	250m
19.06.2019 18:30	10 min	200-250m
19.06.2019 19:10	40 min	250m
19.06.2019 19:50	10 min	200-250m
19.06.2019 20:10	10 min	200-250m
19.06.2019 20:20	10 min	250m
19.06.2019 20:40	10 min	120-250m
19.06.2019 20:50	10 min	140-250m
19.06.2019 21:00	20 min	120-250m
19.06.2019 21:20	1 hours 00 min	250m
19.06.2019 22:20	10 min	60m 120-250m
19.06.2019 22:30	10 min	160-250m
19.06.2019 22:40	10 min	140-250m
19.06.2019 22:50	30 min	200-250m
19.06.2019 23:20	10 min	180-250m
19.06.2019 23:30	30 min	160-250m
20.06.2019 00:00	10 min	140-250m
20.06.2019 00:10	10 min	120-250m
20.06.2019 00:20	10 min	140-250m
20.06.2019 00:30	10 min	180-250m
20.06.2019 02:00	20 min	180-250m
20.06.2019 02:20	10 min	200-250m
20.06.2019 02:30	10 min	200m
20.06.2019 05:30	10 min	200m
20.06.2019 05:50	10 min	160m 200m
20.06.2019 10:40	10 min	Gill data missing
20.06.2019 16:40	20 min	250m
20.06.2019 17:20	20 min	250m
21.06.2019 09:40	10 min	Gill data missing
22.06.2019 21:00	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
24.06.2019 01:00	10 min	Gill data missing
24.06.2019 03:30	10 min	Gill data missing
24.06.2019 06:10	10 min	Gill data missing
24.06.2019 17:40	10 min	Gill data missing
25.06.2019 16:10	10 min	250m
25.06.2019 17:00	10 min	250m
26.06.2019 01:50	10 min	60-250m
26.06.2019 02:00	10 min	80-250m
26.06.2019 02:10	10 min	40m 80-250m
26.06.2019 02:20	20 min	120-250m
26.06.2019 02:40	10 min	80-250m
26.06.2019 02:50	10 min	40-250m
26.06.2019 03:00	40 min	60-250m
26.06.2019 03:40	10 min	40-250m
26.06.2019 03:50	10 min	80-250m
26.06.2019 04:00	10 min	60-250m
26.06.2019 04:10	10 min	40-250m
26.06.2019 04:20	10 min	40m 80-250m
26.06.2019 04:30	20 min	40-250m
26.06.2019 04:50	10 min	40m 80-250m
26.06.2019 05:00	10 min	40-250m
26.06.2019 05:10	10 min	40m 80-250m
26.06.2019 05:20	10 min	40-250m
26.06.2019 05:30	10 min	40m 60m 100-250m
26.06.2019 05:40	10 min	120-250m
26.06.2019 05:50	10 min	40m 60m 100-250m
26.06.2019 06:00	10 min	60m 120-250m
26.06.2019 06:10	10 min	120-250m
26.06.2019 06:20	10 min	80m 120-250m
26.06.2019 06:30	10 min	40m 60m 120-250m
26.06.2019 06:40	10 min	40m 80-250m
26.06.2019 06:50	20 min	60m 120-250m
26.06.2019 07:10	20 min	120-250m
26.06.2019 07:30	10 min	100m 160-250m
26.06.2019 07:40	10 min	250m
26.06.2019 07:50	10 min	200-250m
26.06.2019 08:40	30 min	40m
26.06.2019 09:10	10 min	40m 100m 140-250m
26.06.2019 10:00	10 min	40m 60m 80m 160m 200m
26.06.2019 10:10	20 min	140m 160m 180m
26.06.2019 10:40	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
26.06.2019 11:30	10 min	40m
26.06.2019 11:40	10 min	40m 60m 80m 250m
26.06.2019 11:50	20 min	40m
26.06.2019 12:20	10 min	40m
26.06.2019 19:30	10 min	40m
26.06.2019 19:50	10 min	Gill data missing
27.06.2019 00:10	10 min	100m 120m 180m 200m
27.06.2019 00:30	1 hours 20 min	80-250m
27.06.2019 01:50	10 min	80m 100m 200m
27.06.2019 02:00	1 hours 40 min	80-250m
27.06.2019 03:40	10 min	60-250m
27.06.2019 03:50	1 hours 10 min	80-250m
27.06.2019 05:10	30 min	80-250m
27.06.2019 05:50	20 min	80-250m
27.06.2019 06:10	10 min	80m 140m 160m 180m
27.06.2019 06:20	40 min	80-250m
27.06.2019 07:10	10 min	80-250m
27.06.2019 07:30	10 min	100m 160m 200-250m
27.06.2019 07:40	1 hours 30 min	80-250m
27.06.2019 09:10	10 min	80m 100m 140-250m
27.06.2019 09:20	1 hours 10 min	80-250m
27.06.2019 11:30	10 min	80-250m
27.06.2019 11:40	10 min	40m 80-250m
27.06.2019 13:40	1 hours 30 min	80-250m
27.06.2019 15:10	10 min	40m 80-250m
27.06.2019 15:20	50 min	80-250m
27.06.2019 16:10	10 min	40m 80-250m
27.06.2019 16:20	10 min	80-250m
27.06.2019 16:30	10 min	40m 80-250m
27.06.2019 16:40	30 min	80-250m
27.06.2019 17:10	10 min	80m 100m 180-250m
27.06.2019 17:20	50 min	80-250m
27.06.2019 18:10	10 min	40m 80-250m
27.06.2019 18:20	10 min	80-250m
27.06.2019 18:30	10 min	40m 80-250m
27.06.2019 18:40	2 hours 30 min	80-250m
27.06.2019 21:10	10 min	80m
27.06.2019 21:20	1 hours 20 min	80-250m
27.06.2019 22:50	50 min	80-250m
27.06.2019 23:50	10 min	80-250m
28.06.2019 13:30	10 min	200m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
28.06.2019 17:10	10 min	40m
30.06.2019 08:30	10 min	200m
30.06.2019 08:40	10 min	120-250m
02.07.2019 10:20	10 min	100m 140m 180m
02.07.2019 22:30	10 min	250m
04.07.2019 12:20	10 min	Gill data missing
05.07.2019 05:50	10 min	140m 160m 250m
05.07.2019 06:00	10 min	80m 100m
05.07.2019 11:10	10 min	80-250m
05.07.2019 11:30	10 min	80-250m
05.07.2019 12:40	10 min	80-250m
05.07.2019 13:20	10 min	Gill data missing
05.07.2019 14:00	10 min	80-250m
05.07.2019 14:20	10 min	80m 200-250m
05.07.2019 15:10	10 min	80-250m
05.07.2019 15:40	10 min	80-250m
05.07.2019 15:50	10 min	180-250m
05.07.2019 16:00	10 min	200-250m
05.07.2019 16:10	10 min	80-250m
05.07.2019 18:40	40 min	80-250m
05.07.2019 19:30	40 min	80-250m
05.07.2019 20:10	10 min	40m 80-250m
05.07.2019 20:20	10 min	120m 180m 200m
05.07.2019 20:30	10 min	40m 80-250m
05.07.2019 20:40	10 min	80-250m
05.07.2019 22:10	10 min	250m
05.07.2019 22:20	10 min	200-250m
05.07.2019 22:30	10 min	80-250m
05.07.2019 22:40	10 min	200-250m
05.07.2019 22:50	10 min	80-250m
05.07.2019 23:00	10 min	200-250m
05.07.2019 23:30	20 min	200-250m
05.07.2019 23:50	10 min	80-250m
06.07.2019 00:00	10 min	250m
06.07.2019 00:20	10 min	Gill data missing
06.07.2019 00:30	10 min	200m
06.07.2019 00:50	20 min	180-250m
06.07.2019 01:10	20 min	250m
06.07.2019 05:30	10 min	200m
06.07.2019 10:00	10 min	250m
08.07.2019 12:40	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
09.07.2019 06:50	10 min	Gill data missing
09.07.2019 12:20	10 min	Gill data missing
09.07.2019 17:30	10 min	Gill data missing
10.07.2019 15:10	10 min	Gill data missing
10.07.2019 16:10	10 min	160m
10.07.2019 16:20	10 min	200-250m
10.07.2019 16:30	10 min	140-250m
10.07.2019 17:00	10 min	140m 160m 180m
10.07.2019 17:10	30 min	120-250m
10.07.2019 17:40	10 min	160m 200-250m
10.07.2019 18:00	10 min	Gill data missing
11.07.2019 00:30	20 min	120-250m
11.07.2019 01:40	10 min	140-250m
11.07.2019 01:50	10 min	200-250m
11.07.2019 02:00	10 min	250m
11.07.2019 03:00	10 min	250m
11.07.2019 04:00	10 min	140-250m
11.07.2019 04:10	10 min	160-250m
11.07.2019 04:20	20 min	120m 160-250m
11.07.2019 04:40	20 min	120-250m
11.07.2019 05:00	10 min	160-250m
11.07.2019 05:10	10 min	180-250m
11.07.2019 05:20	10 min	200-250m
11.07.2019 05:30	20 min	250m
11.07.2019 05:50	10 min	140-250m
11.07.2019 06:00	10 min	120-250m
11.07.2019 06:10	10 min	160-250m
11.07.2019 06:20	10 min	180-250m
11.07.2019 06:30	10 min	160-250m
11.07.2019 06:40	10 min	120m 140m 160m 180m 200m
11.07.2019 06:50	20 min	160m 180m 200m
11.07.2019 10:10	10 min	200-250m
11.07.2019 13:40	20 min	100-250m
11.07.2019 14:10	10 min	250m
11.07.2019 14:20	10 min	140-250m
11.07.2019 14:30	20 min	250m
11.07.2019 14:50	10 min	160-250m
11.07.2019 15:00	20 min	120-250m
11.07.2019 15:20	10 min	100-250m
11.07.2019 15:30	10 min	120-250m
11.07.2019 15:40	10 min	100-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
11.07.2019 15:50	10 min	160-250m
11.07.2019 16:00	10 min	200-250m
11.07.2019 16:50	10 min	80m
11.07.2019 20:10	10 min	120-250m
11.07.2019 20:20	10 min	120m 140m 160m 180m 200m
11.07.2019 20:30	20 min	160-250m
11.07.2019 20:50	10 min	120-250m
11.07.2019 21:00	10 min	100-250m
11.07.2019 21:10	10 min	250m
11.07.2019 22:00	10 min	200-250m
11.07.2019 22:10	10 min	120-250m
11.07.2019 22:30	20 min	120m 140m 160m 180m 250m
11.07.2019 22:50	20 min	160-250m
11.07.2019 23:20	10 min	180m
11.07.2019 23:40	10 min	120m 140m 160m
11.07.2019 23:50	20 min	100m 140-250m
12.07.2019 00:10	10 min	100-250m
12.07.2019 00:20	10 min	120-250m
12.07.2019 00:30	10 min	250m
12.07.2019 00:40	10 min	80-250m
12.07.2019 00:50	10 min	100-250m
12.07.2019 01:00	10 min	100m 120m 140m 180-250m
12.07.2019 01:10	1 hours 50 min	140-250m
12.07.2019 03:00	10 min	all LiDAR data missing
12.07.2019 03:10	10 min	all LiDAR data missing
12.07.2019 03:20	10 min	30m 60m 80m 100m 120m 140m 160m 180m 200m
12.07.2019 03:30	40 min	80m 100m 120m 140m 160m 180m 200m
12.07.2019 04:10	10 min	100m 120m 140m
12.07.2019 04:20	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m 200m
12.07.2019 04:30	10 min	30m 40m 60m 80m
12.07.2019 04:40	10 min	30m 80m
12.07.2019 04:50	10 min	30m 40m 60m 80m 100m 120m 180-250m
12.07.2019 05:00	10 min	all LiDAR data missing
12.07.2019 05:10	10 min	80-250m
12.07.2019 05:20	20 min	all LiDAR data missing
12.07.2019 05:50	10 min	60m 80m
12.07.2019 06:00	20 min	30m 40m 60m 80m
12.07.2019 06:20	10 min	60m 80m
12.07.2019 06:30	10 min	80m
12.07.2019 06:40	20 min	100m 140-250m
12.07.2019 07:00	20 min	30m 120-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
12.07.2019 07:20	10 min	all LiDAR data missing
12.07.2019 07:30	10 min	100-250m
12.07.2019 07:40	10 min	200-250m
12.07.2019 08:00	10 min	180m 200m
12.07.2019 11:20	10 min	250m
12.07.2019 14:00	10 min	250m
12.07.2019 14:10	10 min	120m 160-250m
12.07.2019 14:30	10 min	250m
12.07.2019 15:00	10 min	120-250m
12.07.2019 15:20	10 min	200m
12.07.2019 16:10	20 min	160-250m
12.07.2019 17:20	10 min	100m 140m
12.07.2019 17:30	10 min	80m 100m 140m 180-250m
12.07.2019 17:40	10 min	80-250m
12.07.2019 18:00	10 min	200m
12.07.2019 18:10	10 min	140m 200-250m
12.07.2019 18:20	10 min	80-250m
12.07.2019 18:40	10 min	180m
12.07.2019 19:40	10 min	120m 140m 160m 200-250m
12.07.2019 19:50	20 min	180m 250m
12.07.2019 20:10	10 min	120m 160m 200m
12.07.2019 20:20	10 min	80m 100m 120m 200m
12.07.2019 20:30	10 min	40m 80-250m
12.07.2019 20:40	20 min	120m 160-250m
12.07.2019 21:10	10 min	80m 100m 120m 160-250m
12.07.2019 21:20	10 min	80-250m
12.07.2019 21:30	10 min	40m 80-250m
12.07.2019 21:40	10 min	80-250m
12.07.2019 21:50	20 min	80m 100m 120m 160m
12.07.2019 22:10	10 min	40m 80-250m
12.07.2019 22:20	20 min	80-250m
12.07.2019 22:40	20 min	120-250m
12.07.2019 23:00	10 min	80-250m
12.07.2019 23:10	10 min	80m 100m 120m 140m 160m 180m 200m
12.07.2019 23:20	10 min	40m 100-250m
12.07.2019 23:30	10 min	160m 200-250m
13.07.2019 00:00	10 min	40m 120-250m
13.07.2019 00:10	10 min	40-250m
13.07.2019 00:20	10 min	80-250m
13.07.2019 00:30	10 min	40m 80-250m
13.07.2019 00:40	10 min	80-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
13.07.2019 00:50	10 min	80m 100m 160-250m
13.07.2019 01:00	10 min	80-250m
13.07.2019 01:50	10 min	100-250m
13.07.2019 02:00	10 min	160m 180m 250m
13.07.2019 03:10	10 min	80-250m
13.07.2019 03:40	10 min	80-250m
13.07.2019 04:00	20 min	80-250m
13.07.2019 04:30	20 min	80-250m
13.07.2019 04:50	10 min	180m 200m
13.07.2019 05:00	10 min	200m
13.07.2019 05:10	10 min	160m 200m
13.07.2019 05:20	10 min	80-250m
13.07.2019 05:30	10 min	80m 100m 120m 140m 160m 180m 200m
13.07.2019 05:40	20 min	80-250m
13.07.2019 06:00	10 min	250m
13.07.2019 06:10	10 min	80-250m
13.07.2019 07:10	10 min	80-250m
13.07.2019 07:30	10 min	80-250m
13.07.2019 07:40	10 min	40m 80-250m
13.07.2019 07:50	40 min	80-250m
13.07.2019 08:50	10 min	80m 120m
13.07.2019 09:20	40 min	80-250m
13.07.2019 10:00	10 min	80m 100m 120m 160-250m
13.07.2019 10:10	10 min	80-250m
13.07.2019 10:30	10 min	120m 140m 180m 200m
13.07.2019 11:00	10 min	80-250m
13.07.2019 11:50	10 min	80m 100m 120m 160-250m
13.07.2019 12:20	10 min	80-250m
13.07.2019 12:30	10 min	80m 140-250m
13.07.2019 12:40	10 min	40m 80-250m
13.07.2019 12:50	10 min	80-250m
13.07.2019 13:00	10 min	40m 80-250m
13.07.2019 13:10	40 min	80-250m
13.07.2019 14:00	10 min	40m 80-250m
13.07.2019 14:10	10 min	80-250m
13.07.2019 14:40	10 min	80m 120-250m
13.07.2019 14:50	10 min	80-250m
13.07.2019 15:00	10 min	160-250m
13.07.2019 15:10	10 min	80-250m
13.07.2019 15:20	10 min	140-250m
13.07.2019 15:30	10 min	120-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
13.07.2019 15:40	10 min	180-250m
13.07.2019 15:50	10 min	120m
13.07.2019 16:00	1 hours 50 min	80-250m
13.07.2019 17:50	10 min	200-250m
13.07.2019 18:00	20 min	80-250m
13.07.2019 18:20	10 min	80m 100m 250m
13.07.2019 18:50	10 min	80m 100m 120m 180-250m
13.07.2019 19:10	10 min	80-250m
13.07.2019 19:40	10 min	80m 140m
13.07.2019 20:00	10 min	80-250m
13.07.2019 20:10	20 min	40m 80-250m
13.07.2019 20:30	30 min	80-250m
13.07.2019 21:00	10 min	40m 80-250m
13.07.2019 21:10	20 min	80-250m
13.07.2019 21:30	10 min	40m 80-250m
13.07.2019 21:40	20 min	80-250m
13.07.2019 22:00	10 min	100m
13.07.2019 22:10	10 min	40m 80-250m
13.07.2019 22:20	20 min	80-250m
13.07.2019 22:40	10 min	80m 100m 120m 160-250m
13.07.2019 22:50	20 min	80-250m
13.07.2019 23:40	10 min	80m 100m 120m 140m 160m 250m
13.07.2019 23:50	30 min	80-250m
14.07.2019 00:30	10 min	80m 200-250m
14.07.2019 00:40	10 min	80m 100m 120m 140m 160m 180m 250m
14.07.2019 00:50	10 min	40m 80-250m
14.07.2019 01:10	10 min	80m 200m
14.07.2019 01:30	10 min	80m 160-250m
14.07.2019 01:40	10 min	80-250m
14.07.2019 01:50	10 min	80m 250m
14.07.2019 06:10	10 min	100m
14.07.2019 06:50	10 min	80m 100m 120m 140m 180-250m
14.07.2019 07:00	10 min	80-250m
14.07.2019 07:30	20 min	200m
14.07.2019 07:50	10 min	200-250m
14.07.2019 08:00	10 min	80-250m
14.07.2019 08:10	10 min	40m 80-250m
14.07.2019 08:20	20 min	80-250m
14.07.2019 08:40	10 min	80m 100m 120m 140m 180-250m
14.07.2019 08:50	10 min	40m 80-250m
14.07.2019 09:00	10 min	80m 100m 250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
14.07.2019 09:10	30 min	80-250m
14.07.2019 10:00	1 hours 10 min	80-250m
14.07.2019 13:20	20 min	80-250m
14.07.2019 13:50	10 min	100m 180-250m
14.07.2019 14:00	10 min	80-250m
14.07.2019 14:20	10 min	80m
14.07.2019 14:50	10 min	80m 100m 140m 180-250m
14.07.2019 15:20	10 min	80-250m
14.07.2019 15:30	10 min	200-250m
14.07.2019 15:40	10 min	80-250m
14.07.2019 15:50	10 min	100m
14.07.2019 16:00	20 min	80-250m
14.07.2019 16:30	10 min	80m 100m 120m 140m
14.07.2019 16:50	10 min	Gill data missing
14.07.2019 17:20	20 min	80-250m
14.07.2019 17:50	10 min	80m 100m 140m 160m 180m 250m
14.07.2019 18:10	20 min	80-250m
14.07.2019 18:40	10 min	80m
14.07.2019 19:20	10 min	Gill data missing
14.07.2019 23:30	10 min	80-250m
15.07.2019 16:30	10 min	40m 140-250m
15.07.2019 19:00	10 min	40m
15.07.2019 19:10	10 min	40m 60m 80m 200-250m
15.07.2019 20:10	10 min	250m
15.07.2019 21:30	10 min	40m
16.07.2019 00:10	10 min	80m 120m 140m 180-250m
16.07.2019 00:40	10 min	120m 180m
16.07.2019 03:50	10 min	120-250m
16.07.2019 04:10	20 min	250m
16.07.2019 05:20	20 min	120m 140m 160m 200m
16.07.2019 05:50	10 min	100m 140-250m
16.07.2019 06:00	10 min	40m 120-250m
16.07.2019 06:10	10 min	120m 200m
16.07.2019 06:30	10 min	250m
16.07.2019 06:40	10 min	160m 180m
16.07.2019 07:00	10 min	80m 140m 160m 180m 200m
16.07.2019 07:10	10 min	120m 140m 200m
16.07.2019 07:20	10 min	100m 120m 160m 180m 200m
16.07.2019 08:10	10 min	250m
16.07.2019 08:30	10 min	120-250m
16.07.2019 08:40	10 min	100-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
16.07.2019 09:00	10 min	80m 100m 120m 140m 160m 180m 200m
16.07.2019 09:10	10 min	80-250m
16.07.2019 09:20	10 min	180m 250m
16.07.2019 09:30	10 min	140m 160m 180m
16.07.2019 09:40	10 min	80-250m
16.07.2019 09:50	10 min	120-250m
16.07.2019 10:10	10 min	160m 200-250m
16.07.2019 10:30	10 min	120-250m
16.07.2019 10:40	10 min	120m 140m 160m 180m
16.07.2019 10:50	10 min	180m 200m
16.07.2019 11:10	10 min	180m 250m
16.07.2019 12:20	10 min	80-250m
16.07.2019 12:30	10 min	100m 120m 200m
16.07.2019 12:40	10 min	140m 160m 180m 250m
16.07.2019 14:10	10 min	140m 180m
16.07.2019 14:40	10 min	160m
16.07.2019 14:50	10 min	140m 180-250m
16.07.2019 15:00	10 min	80-250m
16.07.2019 15:20	10 min	100m
16.07.2019 15:40	10 min	180-250m
16.07.2019 15:50	10 min	140-250m
16.07.2019 16:10	10 min	180m
16.07.2019 17:30	10 min	120-250m
16.07.2019 17:40	10 min	140m 180m 200m
16.07.2019 17:50	20 min	80-250m
16.07.2019 18:30	10 min	80-250m
16.07.2019 18:50	10 min	80m 120m 160-250m
16.07.2019 19:30	10 min	80-250m
16.07.2019 20:00	20 min	80-250m
16.07.2019 21:20	10 min	80-250m
16.07.2019 22:20	10 min	80-250m
16.07.2019 23:40	10 min	120m
16.07.2019 23:50	10 min	80-250m
17.07.2019 01:10	10 min	60m 80m 100m 180m 250m
17.07.2019 02:00	10 min	60-250m
17.07.2019 02:10	10 min	all LiDAR data missing
17.07.2019 02:20	10 min	30m 40m 80-250m
17.07.2019 02:30	20 min	all LiDAR data missing
17.07.2019 02:50	10 min	30m 40m 80-250m
17.07.2019 03:00	10 min	40m 80-250m
17.07.2019 03:20	10 min	80m 160m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
17.07.2019 03:30	10 min	all LiDAR data missing
17.07.2019 10:40	10 min	250m
17.07.2019 13:40	10 min	Gill data missing
18.07.2019 14:10	10 min	Gill data missing
18.07.2019 16:10	10 min	250m
18.07.2019 19:30	10 min	Gill data missing
18.07.2019 19:40	20 min	80-250m
18.07.2019 20:10	10 min	180m
18.07.2019 20:20	20 min	80-250m
18.07.2019 21:30	20 min	80-250m
18.07.2019 23:30	20 min	160-250m
19.07.2019 01:10	10 min	180-250m
19.07.2019 01:20	10 min	250m
20.07.2019 06:30	20 min	250m
20.07.2019 06:50	20 min	200-250m
20.07.2019 07:30	20 min	180-250m
20.07.2019 07:50	10 min	120m 140m 160m 180m 200m
20.07.2019 21:10	10 min	200-250m
20.07.2019 21:20	30 min	250m
21.07.2019 06:00	10 min	40m
21.07.2019 19:00	20 min	250m
21.07.2019 19:20	30 min	200-250m
21.07.2019 19:50	10 min	250m
22.07.2019 18:30	10 min	250m
22.07.2019 18:50	30 min	250m
22.07.2019 19:50	1 hours 00 min	250m
22.07.2019 21:00	10 min	250m
22.07.2019 21:20	30 min	250m
22.07.2019 21:50	30 min	200-250m
22.07.2019 22:20	10 min	250m
22.07.2019 22:30	10 min	200-250m
22.07.2019 22:40	10 min	160-250m
22.07.2019 22:50	10 min	200-250m
22.07.2019 23:00	10 min	250m
22.07.2019 23:50	10 min	250m
23.07.2019 00:10	20 min	250m
23.07.2019 07:20	30 min	250m
23.07.2019 19:40	10 min	250m
23.07.2019 20:10	1 hours 20 min	250m
25.07.2019 04:50	10 min	250m
25.07.2019 05:10	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
26.07.2019 06:00	10 min	Gill data missing
28.07.2019 23:30	10 min	120-250m
28.07.2019 23:40	10 min	120m 180-250m
28.07.2019 23:50	10 min	100-250m
29.07.2019 00:00	10 min	120-250m
29.07.2019 00:10	10 min	200-250m
29.07.2019 03:10	10 min	250m
30.07.2019 21:50	20 min	250m
31.07.2019 11:50	10 min	250m
01.08.2019 02:00	10 min	180m 250m
01.08.2019 03:30	10 min	40m 250m
01.08.2019 04:50	10 min	250m
01.08.2019 05:00	10 min	180m 250m
01.08.2019 05:10	10 min	140-250m
01.08.2019 05:20	10 min	160m 180m 250m
01.08.2019 05:30	10 min	140m 160m 180m 200m
01.08.2019 05:40	10 min	120-250m
01.08.2019 06:00	10 min	160m 250m
01.08.2019 06:10	10 min	120-250m
01.08.2019 06:30	10 min	180m
01.08.2019 07:50	10 min	200m
01.08.2019 16:40	10 min	Gill data missing
01.08.2019 17:30	10 min	250m
02.08.2019 03:50	10 min	250m
02.08.2019 08:40	10 min	140-250m
02.08.2019 08:50	10 min	200-250m
02.08.2019 10:50	10 min	250m
02.08.2019 11:10	20 min	250m
02.08.2019 14:30	10 min	250m
03.08.2019 00:10	10 min	180-250m
03.08.2019 00:40	10 min	80m 200m
03.08.2019 05:00	10 min	80m 120m 200-250m
03.08.2019 05:20	10 min	80-250m
04.08.2019 01:40	10 min	Gill data missing
04.08.2019 02:10	10 min	250m
04.08.2019 02:40	20 min	250m
04.08.2019 04:30	10 min	250m
04.08.2019 04:50	10 min	250m
04.08.2019 07:10	20 min	250m
04.08.2019 09:10	10 min	250m
04.08.2019 10:10	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
05.08.2019 10:50	10 min	250m
05.08.2019 11:00	10 min	140-250m
05.08.2019 11:10	10 min	120-250m
05.08.2019 11:20	10 min	80-250m
05.08.2019 11:30	10 min	200-250m
05.08.2019 11:40	10 min	250m
05.08.2019 21:00	10 min	Gill data missing
06.08.2019 00:50	10 min	Gill data missing
06.08.2019 03:00	10 min	Gill data missing
06.08.2019 05:00	10 min	250m
07.08.2019 20:30	10 min	Gill data missing
08.08.2019 15:50	10 min	180m
08.08.2019 21:10	10 min	Gill data missing
09.08.2019 13:20	10 min	250m
12.08.2019 16:20	10 min	200-250m
12.08.2019 19:00	10 min	Gill data missing
12.08.2019 19:30	10 min	250m
12.08.2019 23:10	10 min	160-250m
14.08.2019 18:30	10 min	140-250m
14.08.2019 21:20	10 min	200-250m
15.08.2019 00:30	10 min	200m
15.08.2019 04:20	10 min	40m
15.08.2019 06:40	10 min	250m
15.08.2019 08:40	10 min	180m
15.08.2019 09:30	10 min	40m 200m
15.08.2019 10:30	10 min	40m 200m
15.08.2019 10:50	10 min	40m 200-250m
15.08.2019 12:10	10 min	40m 120m 140m 160m
15.08.2019 17:00	10 min	Gill data missing
15.08.2019 19:40	10 min	Gill data missing
17.08.2019 23:40	10 min	Gill data missing
19.08.2019 19:10	10 min	80-250m
19.08.2019 21:30	10 min	80-250m
20.08.2019 17:10	10 min	Gill data missing
20.08.2019 23:10	10 min	Gill data missing
21.08.2019 19:00	10 min	Gill data missing
22.08.2019 02:00	10 min	Gill data missing
23.08.2019 01:10	10 min	Gill data missing
23.08.2019 17:50	20 min	180m 250m
23.08.2019 18:10	10 min	180-250m
23.08.2019 18:20	20 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
24.08.2019 02:50	10 min	Gill data missing
25.08.2019 02:10	10 min	Gill data missing
26.08.2019 23:00	10 min	80m
26.08.2019 23:20	10 min	80m
26.08.2019 23:50	10 min	100m
27.08.2019 00:10	10 min	100m
27.08.2019 00:30	10 min	100m
27.08.2019 08:30	10 min	Gill data missing
28.08.2019 00:50	10 min	Gill data missing
28.08.2019 15:30	10 min	200-250m
28.08.2019 17:40	10 min	250m
28.08.2019 17:50	30 min	180-250m
28.08.2019 18:50	10 min	250m
29.08.2019 02:50	10 min	250m
29.08.2019 11:30	10 min	200m
29.08.2019 21:20	10 min	Gill data missing
29.08.2019 22:10	10 min	Gill data missing
30.08.2019 03:00	10 min	Gill data missing
31.08.2019 06:00	10 min	Gill data missing
31.08.2019 12:30	10 min	Gill data missing
31.08.2019 21:30	10 min	Gill data missing
01.09.2019 00:40	10 min	40m 80m 100m 140-250m
01.09.2019 11:10	10 min	Gill data missing
03.09.2019 13:10	10 min	120m 160m 200-250m
03.09.2019 13:50	10 min	Gill data missing
03.09.2019 17:00	10 min	180m
04.09.2019 07:30	10 min	180m
04.09.2019 07:50	20 min	250m
04.09.2019 09:10	10 min	200m
04.09.2019 10:30	10 min	200m
04.09.2019 11:20	10 min	250m
06.09.2019 05:20	10 min	Gill data missing
06.09.2019 17:30	10 min	250m
07.09.2019 14:20	10 min	200m
08.09.2019 10:00	10 min	250m
09.09.2019 04:20	10 min	Gill data missing
10.09.2019 15:50	10 min	30m 40m 60m 100m 140m 180m
11.09.2019 14:00	10 min	140m
12.09.2019 04:00	10 min	Gill data missing
13.09.2019 00:10	40 min	80-250m
13.09.2019 00:50	10 min	180m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
13.09.2019 01:20	10 min	250m
13.09.2019 01:30	10 min	80m 100m 120m 250m
13.09.2019 02:00	20 min	80-250m
13.09.2019 02:40	10 min	200m
13.09.2019 03:00	10 min	250m
13.09.2019 03:10	10 min	180m 250m
13.09.2019 06:30	10 min	Gill data missing
13.09.2019 08:00	10 min	Gill data missing
14.09.2019 18:40	10 min	Gill data missing
16.09.2019 08:10	10 min	80m 140m 160m
16.09.2019 09:10	10 min	Gill data missing
16.09.2019 10:10	10 min	Gill data missing
16.09.2019 15:10	10 min	Gill data missing
17.09.2019 08:10	10 min	40m 60m 100m 120m
17.09.2019 09:00	10 min	Gill data missing
18.09.2019 07:00	10 min	Gill data missing
18.09.2019 11:10	10 min	Gill data missing
18.09.2019 15:20	10 min	Gill data missing
19.09.2019 18:50	10 min	250m
19.09.2019 20:40	10 min	Gill data missing
20.09.2019 14:20	10 min	Gill data missing
22.09.2019 11:30	10 min	Gill data missing
23.09.2019 00:40	20 min	250m
23.09.2019 01:20	20 min	200m
23.09.2019 01:50	10 min	140m 180m 200m
23.09.2019 02:00	10 min	200-250m
23.09.2019 02:10	10 min	180-250m
23.09.2019 02:20	10 min	250m
23.09.2019 03:20	10 min	180-250m
23.09.2019 03:40	40 min	160-250m
23.09.2019 10:10	10 min	180m
23.09.2019 10:40	10 min	250m
23.09.2019 12:10	10 min	Gill data missing
23.09.2019 16:10	10 min	250m
24.09.2019 22:20	10 min	140m
24.09.2019 23:10	10 min	120m
25.09.2019 00:10	10 min	40m 160m 180m
25.09.2019 01:10	20 min	40m 200-250m
25.09.2019 01:30	10 min	200-250m
25.09.2019 01:40	10 min	200m
25.09.2019 02:00	10 min	180-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
25.09.2019 03:20	10 min	250m
25.09.2019 06:30	10 min	40m 140m
25.09.2019 08:20	10 min	180m
25.09.2019 08:40	10 min	250m
25.09.2019 11:50	10 min	250m
25.09.2019 23:50	10 min	120m 140m 160m 180m
26.09.2019 00:10	10 min	100m 120m 140m 160m 180m 200m
26.09.2019 00:20	10 min	120m 140m
26.09.2019 00:30	20 min	80-250m
26.09.2019 01:00	20 min	80-250m
26.09.2019 01:20	10 min	160m 180m
26.09.2019 02:10	20 min	80-250m
26.09.2019 02:30	10 min	120m
26.09.2019 02:50	10 min	100m 120m 180m 250m
26.09.2019 03:30	10 min	80-250m
26.09.2019 03:40	10 min	80m 100m
26.09.2019 04:20	10 min	80-250m
26.09.2019 04:50	10 min	80m 100m 120m 140m 160m 200-250m
26.09.2019 05:10	10 min	80-250m
26.09.2019 05:20	10 min	80m 140m 160m
26.09.2019 05:30	10 min	80m 100m 120m 140m 160m 180m 200m
26.09.2019 05:40	10 min	80-250m
26.09.2019 05:50	10 min	80m 100m 140m 160m 180m 250m
26.09.2019 06:00	30 min	80-250m
26.09.2019 06:30	10 min	80m 120-250m
26.09.2019 06:40	10 min	120m 180-250m
26.09.2019 06:50	10 min	140-250m
26.09.2019 07:00	1 hours 00 min	80-250m
26.09.2019 08:20	40 min	80-250m
26.09.2019 09:10	10 min	250m
26.09.2019 09:20	10 min	100m 160-250m
26.09.2019 09:30	50 min	80-250m
26.09.2019 10:30	10 min	250m
26.09.2019 10:40	50 min	80-250m
26.09.2019 11:30	10 min	80m 120m 180-250m
26.09.2019 11:40	20 min	180m
26.09.2019 12:00	10 min	180m 200m
26.09.2019 12:10	20 min	120m 140m 160m 200-250m
26.09.2019 12:30	10 min	100m 120m 140m 160m
26.09.2019 12:40	10 min	120m 140m
26.09.2019 12:50	10 min	140m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
26.09.2019 13:00	20 min	100m 120m 140m 250m
26.09.2019 13:20	30 min	120m 140m 160m
26.09.2019 14:00	10 min	120m 140m
26.09.2019 14:10	10 min	120m 140m 160m 180m
26.09.2019 14:20	10 min	100m 120m 140m
26.09.2019 14:30	30 min	80-250m
26.09.2019 15:00	10 min	80m 120-250m
26.09.2019 15:10	10 min	160m 180m 200m
26.09.2019 15:20	20 min	140-250m
26.09.2019 15:50	10 min	160-250m
26.09.2019 16:30	10 min	160-250m
26.09.2019 16:40	10 min	120m 160-250m
26.09.2019 17:00	10 min	140m 160m 180m 200m
26.09.2019 17:10	10 min	80-250m
26.09.2019 17:20	10 min	100-250m
26.09.2019 17:30	10 min	120m 140m 160m 180m 200m
26.09.2019 17:40	10 min	140m 180-250m
26.09.2019 17:50	10 min	250m
26.09.2019 18:00	10 min	80-250m
26.09.2019 21:40	10 min	Gill data missing
27.09.2019 13:00	10 min	250m
27.09.2019 15:40	10 min	250m
27.09.2019 18:00	10 min	200-250m
27.09.2019 19:00	20 min	250m
28.09.2019 15:10	10 min	250m
29.09.2019 06:10	10 min	160m
29.09.2019 07:10	10 min	250m
29.09.2019 08:00	10 min	160m
29.09.2019 08:50	10 min	140m
29.09.2019 09:20	20 min	120m
29.09.2019 09:40	10 min	120m 140m 180m 250m
29.09.2019 09:50	10 min	120m 200m
29.09.2019 10:10	10 min	140m 160m 200m
29.09.2019 11:30	10 min	120m
29.09.2019 12:40	20 min	160m 250m
29.09.2019 13:00	20 min	180m
29.09.2019 13:30	20 min	200m
29.09.2019 15:30	10 min	250m
29.09.2019 17:00	10 min	200-250m
29.09.2019 17:10	10 min	250m
29.09.2019 18:10	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
29.09.2019 19:10	10 min	250m
29.09.2019 22:00	10 min	80-250m
29.09.2019 22:30	10 min	100m 160-250m
29.09.2019 22:40	10 min	160-250m
29.09.2019 22:50	10 min	80m 140-250m
29.09.2019 23:00	10 min	120m 160-250m
29.09.2019 23:10	10 min	80m 200m
29.09.2019 23:50	10 min	160-250m
30.09.2019 00:00	10 min	180-250m
30.09.2019 00:10	10 min	120-250m
30.09.2019 00:20	10 min	180-250m
30.09.2019 00:30	10 min	80m 100m 120m 140m 160m 250m
30.09.2019 19:50	10 min	Gill data missing
30.09.2019 23:00	10 min	30m 40m 60m 80m 100m 140-250m
30.09.2019 23:10	10 min	160-250m
30.09.2019 23:20	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
30.09.2019 23:30	10 min	30m 40m 60m 80m 100m 140m
30.09.2019 23:40	10 min	250m
30.09.2019 23:50	10 min	160m 200-250m
01.10.2019 00:00	10 min	120-250m
01.10.2019 00:10	10 min	all LiDAR data missing
01.10.2019 00:20	10 min	30m 40m 60m 80m 100m 120m 140m 180m
01.10.2019 00:30	20 min	all LiDAR data missing
01.10.2019 00:50	10 min	30m 40m 60m 80m 100m 120m 140m
01.10.2019 01:00	10 min	all LiDAR data missing
01.10.2019 01:10	10 min	60m 100m 120m 140m
01.10.2019 01:20	10 min	30m 160-250m
01.10.2019 01:30	10 min	180m 250m
01.10.2019 01:50	20 min	80-250m
01.10.2019 02:10	10 min	40m 80-250m
01.10.2019 02:20	10 min	80-250m
01.10.2019 02:30	10 min	80m 100m 160m 200-250m
01.10.2019 02:40	30 min	all LiDAR data missing
01.10.2019 14:40	10 min	40m
02.10.2019 17:40	10 min	Gill data missing
03.10.2019 04:00	10 min	Gill data missing
03.10.2019 20:00	10 min	Gill data missing
03.10.2019 22:30	10 min	Gill data missing
05.10.2019 05:50	40 min	250m
05.10.2019 06:30	10 min	30m 40m 60m 80m 100m 120m 140m
05.10.2019 06:40	10 min	140-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
05.10.2019 16:40	10 min	Gill data missing
05.10.2019 18:50	10 min	Gill data missing
07.10.2019 19:10	10 min	100m
08.10.2019 00:10	10 min	120m 140m 160m 180m 250m
08.10.2019 00:40	10 min	120m 160m 250m
08.10.2019 00:50	10 min	120m 250m
08.10.2019 01:10	20 min	120m 140m 200-250m
08.10.2019 01:30	10 min	180-250m
08.10.2019 03:30	10 min	200-250m
08.10.2019 07:20	10 min	Gill data missing
09.10.2019 19:10	10 min	250m
09.10.2019 20:10	10 min	Gill data missing
11.10.2019 00:30	10 min	250m
12.10.2019 14:40	10 min	Gill data missing
12.10.2019 23:10	10 min	Gill data missing
12.10.2019 23:40	10 min	40m 160-250m
13.10.2019 00:10	10 min	180-250m
13.10.2019 00:20	20 min	250m
13.10.2019 00:40	20 min	140m 160m 180m 200m
13.10.2019 01:00	10 min	160m 200m
13.10.2019 01:10	10 min	160m
13.10.2019 01:20	10 min	120-250m
13.10.2019 01:30	10 min	200-250m
13.10.2019 01:40	10 min	160-250m
13.10.2019 01:50	10 min	100m 140-250m
13.10.2019 02:00	10 min	140-250m
13.10.2019 02:10	10 min	80-250m
13.10.2019 02:20	20 min	140m 180-250m
13.10.2019 02:40	20 min	180-250m
13.10.2019 03:00	10 min	250m
13.10.2019 03:10	10 min	160-250m
13.10.2019 03:20	10 min	200-250m
13.10.2019 03:50	10 min	160-250m
13.10.2019 04:00	10 min	180-250m
13.10.2019 04:10	10 min	160-250m
13.10.2019 04:20	10 min	200-250m
13.10.2019 05:10	10 min	200-250m
13.10.2019 05:20	10 min	180-250m
13.10.2019 05:30	20 min	160-250m
13.10.2019 06:00	10 min	200-250m
13.10.2019 06:20	10 min	200-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
13.10.2019 09:00	10 min	160-250m
13.10.2019 09:30	10 min	100-250m
13.10.2019 09:40	30 min	80-250m
13.10.2019 10:10	20 min	40m 80-250m
13.10.2019 10:30	10 min	80-250m
13.10.2019 10:40	10 min	80m 120-250m
13.10.2019 10:50	40 min	80-250m
13.10.2019 11:30	10 min	120-250m
13.10.2019 11:40	10 min	80-250m
13.10.2019 11:50	10 min	140-250m
13.10.2019 12:00	10 min	100-250m
13.10.2019 12:10	20 min	250m
13.10.2019 12:40	10 min	180m
14.10.2019 00:10	10 min	40m 80-250m
14.10.2019 00:20	10 min	80-250m
14.10.2019 01:40	10 min	80-250m
14.10.2019 02:00	10 min	80-250m
14.10.2019 02:10	10 min	80m
14.10.2019 02:40	10 min	80-250m
14.10.2019 04:10	10 min	80-250m
14.10.2019 14:10	10 min	250m
14.10.2019 14:50	10 min	250m
16.10.2019 00:40	10 min	250m
16.10.2019 06:00	10 min	200-250m
16.10.2019 07:00	10 min	250m
16.10.2019 17:10	10 min	140m
16.10.2019 17:30	20 min	250m
16.10.2019 18:00	10 min	160m 200-250m
16.10.2019 18:10	10 min	Gill data missing
16.10.2019 18:20	10 min	160m
16.10.2019 23:20	10 min	40m
17.10.2019 11:10	10 min	Gill data missing
17.10.2019 16:20	10 min	Gill data missing
18.10.2019 06:00	20 min	200m
19.10.2019 09:40	10 min	Gill data missing
20.10.2019 01:10	10 min	Gill data missing
20.10.2019 10:50	10 min	Gill data missing
21.10.2019 11:10	10 min	250m
21.10.2019 11:30	10 min	180m
21.10.2019 13:10	10 min	160m
21.10.2019 14:00	10 min	200m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
21.10.2019 14:20	10 min	140m 180-250m
21.10.2019 15:00	10 min	180m
21.10.2019 15:20	10 min	140m 160m
21.10.2019 15:30	10 min	120m 140m 160m 200m
21.10.2019 15:40	10 min	120m 180m
21.10.2019 15:50	10 min	120m 160m 180m 200m
21.10.2019 16:00	10 min	120m 160-250m
21.10.2019 16:10	20 min	100m 180m
21.10.2019 16:50	10 min	140m 160m 200-250m
21.10.2019 17:10	10 min	120-250m
21.10.2019 17:20	20 min	100-250m
21.10.2019 17:40	10 min	140m
21.10.2019 18:00	10 min	120m 140m
21.10.2019 18:10	10 min	80m 120m 140m 160m
21.10.2019 18:20	10 min	120m
21.10.2019 18:40	10 min	60-250m
21.10.2019 18:50	10 min	120m
21.10.2019 19:00	10 min	120m 140m 160m 180m 200m
21.10.2019 19:10	10 min	160m 180m 200m
21.10.2019 19:20	10 min	120-250m
21.10.2019 19:30	20 min	60m 160-250m
21.10.2019 19:50	10 min	250m
21.10.2019 22:00	10 min	100m 120m
21.10.2019 22:10	10 min	60m 160-250m
21.10.2019 22:20	10 min	100-250m
21.10.2019 22:40	10 min	120m 140m
21.10.2019 22:50	10 min	80m 100m 120m 140m 160m 200m
21.10.2019 23:30	10 min	30m 40m 80m
22.10.2019 00:00	20 min	40m
22.10.2019 00:40	10 min	180m
22.10.2019 00:50	20 min	80m 120-250m
22.10.2019 01:20	10 min	120m 160m
22.10.2019 01:40	10 min	100m
22.10.2019 01:50	10 min	60m 140m 160m
22.10.2019 05:00	10 min	Gill data missing
22.10.2019 11:50	10 min	Gill data missing
22.10.2019 23:20	10 min	Gill data missing
23.10.2019 05:10	10 min	Gill data missing
23.10.2019 10:00	10 min	Gill data missing
24.10.2019 03:40	10 min	40m 80-250m
24.10.2019 03:50	10 min	80-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
24.10.2019 04:00	10 min	80m 140-250m
24.10.2019 04:10	10 min	140m 180m
24.10.2019 04:20	10 min	80-250m
24.10.2019 04:30	10 min	80m 140-250m
24.10.2019 04:50	10 min	80-250m
24.10.2019 05:00	10 min	180m 250m
24.10.2019 05:40	20 min	80-250m
24.10.2019 06:40	20 min	80-250m
24.10.2019 07:00	10 min	120m 180-250m
24.10.2019 07:10	10 min	80-250m
24.10.2019 07:20	10 min	120m 160m 250m
24.10.2019 07:30	10 min	80-250m
24.10.2019 07:40	10 min	200m
24.10.2019 08:00	10 min	80m 100m 160m 180m 200m
24.10.2019 08:10	10 min	140m 180m
24.10.2019 08:20	10 min	80-250m
24.10.2019 08:30	10 min	250m
24.10.2019 08:40	10 min	200-250m
24.10.2019 08:50	40 min	80-250m
24.10.2019 09:30	10 min	120-250m
24.10.2019 10:00	10 min	160m
24.10.2019 10:10	10 min	140-250m
24.10.2019 10:20	10 min	200m
24.10.2019 11:10	10 min	250m
24.10.2019 11:20	10 min	140m 250m
24.10.2019 11:30	10 min	140-250m
24.10.2019 22:20	10 min	Gill data missing
25.10.2019 02:30	10 min	Gill data missing
30.10.2019 19:30	10 min	Gill data missing
31.10.2019 11:40	10 min	Gill data missing
31.10.2019 20:10	10 min	Gill data missing
01.11.2019 12:30	10 min	250m
01.11.2019 13:00	10 min	250m
01.11.2019 13:10	10 min	160-250m
01.11.2019 13:20	10 min	250m
01.11.2019 14:50	20 min	250m
01.11.2019 15:10	10 min	200-250m
01.11.2019 15:20	20 min	250m
01.11.2019 15:40	10 min	160-250m
01.11.2019 15:50	20 min	180-250m
01.11.2019 16:10	10 min	200-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
01.11.2019 16:40	50 min	250m
01.11.2019 17:30	20 min	180-250m
01.11.2019 17:50	10 min	160-250m
01.11.2019 18:00	20 min	180-250m
01.11.2019 18:20	10 min	250m
01.11.2019 18:30	10 min	200-250m
01.11.2019 18:40	10 min	250m
01.11.2019 19:20	20 min	250m
01.11.2019 20:30	10 min	200-250m
01.11.2019 20:40	10 min	250m
01.11.2019 20:50	20 min	200-250m
01.11.2019 21:10	10 min	140-250m
01.11.2019 21:20	20 min	120-250m
01.11.2019 21:40	10 min	140-250m
01.11.2019 21:50	20 min	250m
01.11.2019 22:10	10 min	200-250m
01.11.2019 22:20	20 min	180-250m
01.11.2019 22:40	10 min	160-250m
01.11.2019 22:50	10 min	120-250m
01.11.2019 23:00	10 min	140-250m
01.11.2019 23:10	10 min	160-250m
01.11.2019 23:20	20 min	140-250m
01.11.2019 23:40	20 min	120-250m
02.11.2019 00:00	10 min	140-250m
02.11.2019 00:10	10 min	120-250m
02.11.2019 00:20	10 min	140-250m
02.11.2019 00:30	10 min	160-250m
02.11.2019 00:40	30 min	180-250m
02.11.2019 01:10	10 min	140-250m
02.11.2019 01:20	10 min	120-250m
02.11.2019 01:30	10 min	140-250m
02.11.2019 01:40	40 min	120-250m
02.11.2019 02:20	10 min	60m 120-250m
02.11.2019 02:30	20 min	120-250m
02.11.2019 02:50	30 min	140-250m
02.11.2019 04:10	10 min	60m 120-250m
02.11.2019 04:20	10 min	140-250m
02.11.2019 04:30	10 min	160-250m
02.11.2019 04:40	40 min	120-250m
02.11.2019 05:20	10 min	250m
02.11.2019 05:30	10 min	200-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
02.11.2019 08:10	10 min	180m 200m
03.11.2019 00:10	10 min	80m
03.11.2019 04:50	10 min	200-250m
03.11.2019 05:50	10 min	80m 160-250m
03.11.2019 06:00	10 min	80m 180-250m
03.11.2019 06:10	10 min	80-250m
03.11.2019 06:20	10 min	80m 100m 140-250m
03.11.2019 06:30	10 min	200m
03.11.2019 06:40	10 min	80-250m
03.11.2019 06:50	10 min	200-250m
03.11.2019 07:00	10 min	180-250m
03.11.2019 07:10	40 min	80-250m
03.11.2019 07:50	10 min	80m 160-250m
03.11.2019 08:00	20 min	80-250m
03.11.2019 08:20	10 min	100m 120m 140m 200-250m
03.11.2019 08:30	20 min	80-250m
03.11.2019 08:50	10 min	60-250m
03.11.2019 09:00	10 min	80-250m
03.11.2019 09:10	20 min	40m 80-250m
03.11.2019 09:30	10 min	80-250m
03.11.2019 11:20	10 min	250m
03.11.2019 11:30	10 min	100m 140-250m
03.11.2019 11:40	10 min	250m
03.11.2019 12:00	10 min	80-250m
03.11.2019 12:10	10 min	200-250m
03.11.2019 12:20	10 min	80-250m
03.11.2019 12:30	10 min	250m
03.11.2019 13:00	10 min	80m 180-250m
03.11.2019 13:10	30 min	250m
03.11.2019 14:20	10 min	250m
03.11.2019 15:20	10 min	80-250m
03.11.2019 15:40	10 min	250m
03.11.2019 16:10	20 min	250m
03.11.2019 16:50	10 min	250m
03.11.2019 17:10	10 min	250m
03.11.2019 17:30	10 min	250m
03.11.2019 18:00	10 min	250m
03.11.2019 18:30	20 min	250m
03.11.2019 19:00	10 min	180-250m
03.11.2019 19:20	10 min	Gill data missing
03.11.2019 19:30	10 min	200-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
03.11.2019 19:40	20 min	80-250m
03.11.2019 20:00	10 min	180-250m
03.11.2019 20:20	10 min	250m
03.11.2019 20:30	10 min	180-250m
03.11.2019 20:40	20 min	250m
03.11.2019 21:00	10 min	180-250m
03.11.2019 21:20	10 min	200-250m
03.11.2019 21:30	10 min	250m
03.11.2019 21:50	10 min	250m
03.11.2019 22:00	10 min	120m 160m 180m 200m
03.11.2019 22:40	10 min	250m
03.11.2019 23:10	10 min	200m
03.11.2019 23:20	10 min	180-250m
03.11.2019 23:30	10 min	160-250m
03.11.2019 23:40	10 min	180-250m
04.11.2019 00:10	10 min	200-250m
04.11.2019 00:40	30 min	200m
04.11.2019 01:30	10 min	200-250m
04.11.2019 01:40	10 min	250m
04.11.2019 02:10	30 min	200m
04.11.2019 02:40	10 min	200-250m
04.11.2019 03:10	10 min	180m 250m
04.11.2019 03:20	10 min	200m
04.11.2019 03:30	10 min	140m 180-250m
04.11.2019 04:40	10 min	200m
04.11.2019 05:50	10 min	200-250m
04.11.2019 06:00	10 min	250m
04.11.2019 06:20	10 min	200-250m
04.11.2019 06:50	10 min	250m
04.11.2019 07:10	10 min	250m
04.11.2019 07:30	10 min	200m
04.11.2019 09:30	10 min	200m
04.11.2019 11:10	10 min	250m
04.11.2019 12:20	10 min	40m
04.11.2019 13:10	10 min	200-250m
04.11.2019 23:20	20 min	250m
05.11.2019 00:10	10 min	250m
05.11.2019 02:50	10 min	250m
05.11.2019 09:50	10 min	160m 200-250m
05.11.2019 10:20	10 min	250m
05.11.2019 10:50	20 min	160m 180m 200m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
05.11.2019 11:10	10 min	250m
05.11.2019 11:40	10 min	250m
05.11.2019 11:50	10 min	180m 250m
05.11.2019 12:00	30 min	250m
05.11.2019 12:40	10 min	200-250m
05.11.2019 13:30	10 min	250m
05.11.2019 16:10	10 min	250m
05.11.2019 16:30	10 min	250m
06.11.2019 13:50	10 min	Gill data missing
06.11.2019 19:40	10 min	160m
06.11.2019 20:30	10 min	180m 250m
07.11.2019 07:30	10 min	40m
07.11.2019 16:30	10 min	250m
07.11.2019 18:00	10 min	250m
08.11.2019 13:20	10 min	Gill data missing
09.11.2019 09:00	20 min	250m
09.11.2019 13:00	10 min	140-250m
09.11.2019 13:10	20 min	140m
09.11.2019 13:50	10 min	180-250m
10.11.2019 01:50	10 min	Gill data missing
11.11.2019 08:50	10 min	250m
11.11.2019 10:10	10 min	40m 180-250m
12.11.2019 15:50	10 min	40m
12.11.2019 22:00	10 min	40m
13.11.2019 00:00	10 min	40m
13.11.2019 00:10	10 min	40m 80-250m
13.11.2019 00:20	1 hours 10 min	80-250m
13.11.2019 01:30	10 min	250m
13.11.2019 01:40	2 hours 20 min	80-250m
13.11.2019 05:00	10 min	250m
13.11.2019 19:30	10 min	Gill data missing
13.11.2019 23:20	10 min	80m 200-250m
14.11.2019 00:40	20 min	250m
14.11.2019 06:00	10 min	Gill data missing
14.11.2019 07:50	10 min	250m
14.11.2019 09:00	10 min	250m
14.11.2019 10:20	10 min	250m
14.11.2019 12:00	10 min	Gill data missing
16.11.2019 15:50	10 min	Gill data missing
17.11.2019 00:10	10 min	60m
17.11.2019 02:20	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
19.11.2019 03:10	10 min	Gill data missing
19.11.2019 05:30	10 min	Gill data missing
20.11.2019 20:00	10 min	250m
20.11.2019 20:50	20 min	250m
20.11.2019 21:20	20 min	250m
20.11.2019 22:10	10 min	250m
20.11.2019 23:00	20 min	250m
20.11.2019 23:40	10 min	250m
21.11.2019 00:00	10 min	250m
21.11.2019 00:10	10 min	200-250m
21.11.2019 00:20	20 min	250m
21.11.2019 00:40	10 min	200-250m
21.11.2019 01:20	30 min	250m
21.11.2019 02:30	10 min	200-250m
21.11.2019 02:40	10 min	180-250m
21.11.2019 02:50	10 min	250m
21.11.2019 03:10	40 min	250m
21.11.2019 04:00	10 min	200m
21.11.2019 07:10	10 min	250m
21.11.2019 07:20	10 min	200-250m
21.11.2019 10:30	10 min	250m
21.11.2019 15:10	10 min	40m 250m
21.11.2019 15:30	10 min	200m
21.11.2019 19:00	10 min	Gill data missing
21.11.2019 19:30	10 min	Gill data missing
22.11.2019 00:10	20 min	80-250m
22.11.2019 01:10	10 min	80m 100m 160-250m
22.11.2019 01:30	10 min	250m
22.11.2019 03:00	10 min	100m 120m 160m 200m
22.11.2019 03:30	10 min	80m 100m 120m 180m 250m
22.11.2019 03:40	10 min	80m 100m 120m 250m
22.11.2019 05:50	10 min	200-250m
22.11.2019 13:50	10 min	Gill data missing
23.11.2019 00:10	10 min	160-250m
23.11.2019 00:20	10 min	100m 140-250m
23.11.2019 00:30	20 min	80-250m
23.11.2019 00:50	10 min	100m 120m 160m 180m
23.11.2019 01:00	10 min	80-250m
23.11.2019 01:10	10 min	100-250m
23.11.2019 01:20	10 min	140m 180m 200m
23.11.2019 01:30	10 min	120m 140m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
23.11.2019 01:40	10 min	140m 200-250m
23.11.2019 01:50	10 min	140-250m
23.11.2019 02:00	10 min	100m 120m 140m 160m 180m 200m
23.11.2019 02:10	10 min	80-250m
23.11.2019 02:20	10 min	80m 120m 140m 160m 180m 200m
23.11.2019 02:30	20 min	80-250m
23.11.2019 03:10	10 min	80m 160m
23.11.2019 03:30	10 min	80-250m
23.11.2019 03:40	10 min	160m 200m
23.11.2019 04:00	10 min	180m
23.11.2019 04:30	10 min	200-250m
23.11.2019 04:40	10 min	250m
23.11.2019 08:50	10 min	250m
23.11.2019 09:40	10 min	250m
23.11.2019 13:30	20 min	250m
23.11.2019 13:50	10 min	120m 200m
23.11.2019 14:10	10 min	80m 120m 160m 250m
23.11.2019 14:50	10 min	40m 80-250m
23.11.2019 17:10	10 min	80m 250m
23.11.2019 19:10	10 min	250m
23.11.2019 19:50	10 min	60m
23.11.2019 20:10	10 min	250m
23.11.2019 20:20	10 min	40m 160-250m
23.11.2019 20:40	10 min	80m 100m 200m
23.11.2019 22:20	10 min	250m
23.11.2019 22:40	10 min	40m 80-250m
23.11.2019 23:20	10 min	250m
24.11.2019 00:30	10 min	Gill data missing
24.11.2019 02:40	10 min	80m
24.11.2019 03:20	10 min	40m
24.11.2019 08:10	10 min	40m 80m 100m 160-250m
25.11.2019 00:10	10 min	100-250m
25.11.2019 02:20	10 min	250m
25.11.2019 03:40	10 min	80m 120-250m
25.11.2019 04:00	20 min	180m
25.11.2019 04:20	10 min	200-250m
25.11.2019 05:00	10 min	250m
25.11.2019 05:10	10 min	160-250m
25.11.2019 05:20	10 min	180-250m
25.11.2019 05:30	10 min	200-250m
25.11.2019 05:40	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
25.11.2019 05:50	10 min	180-250m
25.11.2019 06:00	10 min	140-250m
25.11.2019 06:10	10 min	180-250m
25.11.2019 06:20	10 min	250m
25.11.2019 09:30	10 min	140m
25.11.2019 09:50	10 min	200-250m
25.11.2019 10:20	10 min	100m 160-250m
25.11.2019 14:40	20 min	250m
25.11.2019 15:30	10 min	250m
25.11.2019 19:00	10 min	250m
25.11.2019 19:10	10 min	140m 180-250m
25.11.2019 19:20	10 min	120-250m
25.11.2019 19:30	10 min	140-250m
25.11.2019 19:40	10 min	120m 180-250m
25.11.2019 19:50	10 min	120-250m
25.11.2019 20:00	10 min	160-250m
25.11.2019 20:10	10 min	200-250m
25.11.2019 20:20	20 min	160-250m
25.11.2019 20:40	30 min	180-250m
25.11.2019 21:10	1 hours 00 min	250m
25.11.2019 22:10	10 min	180-250m
25.11.2019 22:20	10 min	250m
25.11.2019 22:30	20 min	200-250m
26.11.2019 00:10	20 min	120-250m
26.11.2019 00:40	20 min	140-250m
26.11.2019 01:00	10 min	250m
26.11.2019 01:20	10 min	140m 250m
26.11.2019 01:40	10 min	140-250m
26.11.2019 01:50	10 min	160-250m
26.11.2019 02:00	10 min	250m
26.11.2019 03:40	10 min	140-250m
26.11.2019 05:00	20 min	80m 160-250m
26.11.2019 05:20	10 min	180m
26.11.2019 05:50	10 min	120m 200-250m
26.11.2019 06:00	10 min	120-250m
26.11.2019 06:10	30 min	80-250m
26.11.2019 06:40	10 min	140m 200-250m
26.11.2019 06:50	10 min	120-250m
26.11.2019 07:00	10 min	100m 120m 250m
26.11.2019 07:10	10 min	100-250m
26.11.2019 07:20	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
26.11.2019 07:30	30 min	200-250m
26.11.2019 08:00	10 min	250m
26.11.2019 08:10	10 min	140-250m
26.11.2019 08:20	10 min	250m
26.11.2019 08:30	10 min	120m 250m
26.11.2019 08:40	10 min	250m
26.11.2019 08:50	10 min	200-250m
26.11.2019 09:00	10 min	40m 80-250m
26.11.2019 09:10	10 min	100-250m
26.11.2019 09:20	10 min	60-250m
26.11.2019 09:30	40 min	80-250m
26.11.2019 10:10	10 min	80m 120-250m
26.11.2019 10:20	10 min	120-250m
26.11.2019 10:30	10 min	80m 120-250m
26.11.2019 10:40	10 min	80-250m
26.11.2019 10:50	10 min	100-250m
26.11.2019 11:00	10 min	140-250m
26.11.2019 11:10	10 min	80-250m
26.11.2019 11:20	10 min	120-250m
26.11.2019 11:30	10 min	80m 120-250m
26.11.2019 11:40	10 min	120-250m
26.11.2019 11:50	40 min	140-250m
26.11.2019 12:30	30 min	80m 120-250m
26.11.2019 13:00	20 min	80-250m
26.11.2019 13:20	10 min	80m 120-250m
26.11.2019 13:30	20 min	120-250m
26.11.2019 13:50	10 min	100-250m
26.11.2019 14:00	10 min	120-250m
26.11.2019 14:10	10 min	140-250m
26.11.2019 14:20	10 min	80-250m
26.11.2019 14:30	10 min	200-250m
26.11.2019 14:40	20 min	250m
26.11.2019 15:20	20 min	160m
26.11.2019 15:50	20 min	200-250m
26.11.2019 16:30	10 min	140m 180m 250m
26.11.2019 17:40	10 min	250m
26.11.2019 17:50	10 min	140-250m
26.11.2019 18:00	10 min	140m 180m 200m
26.11.2019 18:10	10 min	250m
26.11.2019 18:20	10 min	200-250m
26.11.2019 18:30	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
26.11.2019 18:40	10 min	200-250m
26.11.2019 18:50	10 min	160m 200-250m
26.11.2019 19:00	10 min	250m
26.11.2019 19:20	10 min	120m 140m 200-250m
26.11.2019 19:30	10 min	200-250m
26.11.2019 19:40	10 min	250m
26.11.2019 20:20	10 min	250m
26.11.2019 20:30	10 min	120m 160-250m
26.11.2019 20:40	30 min	200-250m
26.11.2019 21:10	10 min	250m
26.11.2019 21:20	10 min	120m 180-250m
26.11.2019 21:30	10 min	180-250m
26.11.2019 21:40	30 min	200-250m
26.11.2019 22:10	10 min	250m
26.11.2019 22:20	10 min	180-250m
26.11.2019 22:30	10 min	100-250m
26.11.2019 22:40	10 min	160-250m
26.11.2019 22:50	10 min	200-250m
26.11.2019 23:00	10 min	180-250m
26.11.2019 23:10	10 min	200-250m
26.11.2019 23:20	10 min	200m
26.11.2019 23:50	10 min	120m
27.11.2019 00:00	10 min	120m 250m
27.11.2019 00:10	10 min	140m 160m 180m 200m
27.11.2019 03:30	10 min	180m
27.11.2019 03:40	10 min	120-250m
27.11.2019 04:40	10 min	200m
27.11.2019 07:10	20 min	200m
27.11.2019 07:30	10 min	180-250m
27.11.2019 18:30	10 min	Gill data missing
28.11.2019 01:10	10 min	140m 160m 180m 250m
28.11.2019 03:00	10 min	140m
28.11.2019 03:10	10 min	120m 140m 180m 250m
28.11.2019 05:00	10 min	120m 140m 160m 200m
28.11.2019 05:10	10 min	120m 180m 200m
28.11.2019 05:20	10 min	160m
28.11.2019 05:30	10 min	100m 120m 140m 200m
28.11.2019 06:20	10 min	200-250m
28.11.2019 07:30	10 min	180m
28.11.2019 08:00	10 min	140m 160m 250m
28.11.2019 09:50	10 min	200-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
28.11.2019 10:10	10 min	250m
28.11.2019 13:40	10 min	60m 80m 250m
28.11.2019 17:30	5 hours 30 min	all LiDAR data missing
29.11.2019 20:10	10 min	Gill data missing
30.11.2019 05:40	10 min	Gill data missing
30.11.2019 22:10	10 min	30m 100m 140m 160m 200m
30.11.2019 22:20	4 hours 20 min	all LiDAR data missing
01.12.2019 08:10	10 min	40m 100m 120m 180m
01.12.2019 09:20	10 min	250m
01.12.2019 10:50	10 min	Gill data missing
01.12.2019 17:20	10 min	250m
02.12.2019 09:50	10 min	Gill data missing
02.12.2019 16:30	10 min	Gill data missing
02.12.2019 17:30	10 min	200-250m
03.12.2019 13:10	10 min	Gill data missing
03.12.2019 13:20	10 min	40m
03.12.2019 17:30	10 min	40m
03.12.2019 22:00	10 min	Gill data missing
04.12.2019 18:40	10 min	Gill data missing
05.12.2019 09:10	20 min	160m
05.12.2019 09:30	10 min	80m 100m 120m 140m 180-250m
05.12.2019 09:40	10 min	80m 100m 120m 160m 250m
05.12.2019 09:50	10 min	200-250m
05.12.2019 10:00	10 min	80-250m
05.12.2019 10:20	10 min	Gill data missing
05.12.2019 13:20	10 min	Gill data missing
06.12.2019 09:00	10 min	250m
06.12.2019 09:10	10 min	200-250m
06.12.2019 09:20	20 min	140-250m
06.12.2019 09:40	10 min	120-250m
06.12.2019 09:50	10 min	140-250m
06.12.2019 10:00	10 min	160-250m
06.12.2019 10:10	50 min	120-250m
06.12.2019 11:00	20 min	140-250m
06.12.2019 11:20	20 min	160-250m
06.12.2019 11:40	20 min	140-250m
06.12.2019 12:00	10 min	180-250m
06.12.2019 13:20	10 min	250m
06.12.2019 13:30	10 min	140-250m
06.12.2019 13:40	50 min	120-250m
06.12.2019 14:30	10 min	140-250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
06.12.2019 14:40	10 min	200-250m
06.12.2019 14:50	10 min	250m
07.12.2019 00:40	10 min	160m 200-250m
07.12.2019 01:30	10 min	250m
07.12.2019 01:40	10 min	80m 100m 120m 160-250m
07.12.2019 01:50	10 min	250m
07.12.2019 02:00	10 min	80m 250m
07.12.2019 04:10	10 min	250m
07.12.2019 04:20	10 min	80m 140m
07.12.2019 04:40	10 min	80-250m
07.12.2019 04:50	10 min	100m 140m 250m
07.12.2019 05:00	10 min	100m 160m 180m 250m
07.12.2019 05:10	10 min	80m 100m 120m 200-250m
07.12.2019 05:20	10 min	80m 250m
07.12.2019 06:10	20 min	80m 160m 200-250m
07.12.2019 14:20	10 min	Gill data missing
07.12.2019 17:20	10 min	80m
07.12.2019 17:30	10 min	40m 80-250m
07.12.2019 17:40	10 min	40-250m
07.12.2019 17:50	3 hours 30 min	all LiDAR data missing
08.12.2019 02:50	10 min	250m
08.12.2019 04:50	10 min	250m
11.12.2019 18:20	10 min	Gill data missing
12.12.2019 00:10	10 min	60-250m
12.12.2019 00:40	10 min	80-250m
12.12.2019 04:10	10 min	250m
12.12.2019 16:00	10 min	40m 80-250m
12.12.2019 16:50	10 min	250m
12.12.2019 17:00	10 min	140-250m
12.12.2019 17:40	20 min	250m
12.12.2019 18:20	10 min	100m 120m 250m
13.12.2019 05:00	10 min	60m
13.12.2019 05:30	10 min	40m
13.12.2019 06:40	10 min	40m
13.12.2019 12:00	3 hours 20 min	all LiDAR data missing
13.12.2019 18:00	10 min	250m
13.12.2019 18:40	10 min	200m
13.12.2019 19:20	10 min	200m
14.12.2019 00:10	10 min	160-250m
14.12.2019 01:50	10 min	80-250m
14.12.2019 02:00	2 hours 40 min	all LiDAR data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
14.12.2019 04:40	10 min	250m
14.12.2019 17:20	3 hours 40 min	all LiDAR data missing
14.12.2019 21:00	10 min	40m 60m 80m 100m 120m 140m
15.12.2019 10:00	2 hours 20 min	all LiDAR data missing
15.12.2019 22:20	4 hours 10 min	all LiDAR data missing
16.12.2019 05:10	10 min	Gill data missing
16.12.2019 15:00	3 hours 40 min	all LiDAR data missing
16.12.2019 18:40	10 min	250m
16.12.2019 19:30	10 min	180m 250m
16.12.2019 19:40	10 min	80-250m
16.12.2019 21:30	10 min	80-250m
17.12.2019 00:00	10 min	Gill data missing
17.12.2019 00:10	10 min	250m
17.12.2019 01:00	10 min	120-250m
17.12.2019 01:50	10 min	160m 180m 200m
17.12.2019 02:00	10 min	140m 160m
17.12.2019 02:30	10 min	180m 250m
17.12.2019 02:40	10 min	200m
17.12.2019 02:50	10 min	140-250m
17.12.2019 03:00	10 min	140m 180-250m
17.12.2019 03:20	10 min	200m
17.12.2019 03:40	20 min	Gill data missing
17.12.2019 04:10	10 min	250m
17.12.2019 04:30	10 min	180-250m
17.12.2019 04:40	2 hours 40 min	all LiDAR data missing
17.12.2019 07:50	20 min	250m
17.12.2019 08:10	10 min	180-250m
17.12.2019 08:20	10 min	140-250m
17.12.2019 08:30	10 min	180-250m
17.12.2019 08:40	10 min	250m
17.12.2019 13:50	30 min	250m
17.12.2019 14:20	10 min	180-250m
17.12.2019 14:30	10 min	160-250m
17.12.2019 14:40	20 min	200-250m
17.12.2019 15:00	10 min	250m
17.12.2019 15:20	10 min	160-250m
17.12.2019 15:30	10 min	120m
17.12.2019 15:40	10 min	140m 160m 180m 200m
17.12.2019 16:10	20 min	160m 180m 200m
17.12.2019 16:30	10 min	160-250m
17.12.2019 16:40	10 min	250m

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
17.12.2019 16:50	20 min	200-250m
17.12.2019 17:10	20 min	120-250m
17.12.2019 17:30	10 min	120m 160m 250m
17.12.2019 17:40	10 min	100m 120m
17.12.2019 17:50	10 min	140m
17.12.2019 18:50	10 min	180m 200m
17.12.2019 19:20	10 min	140m 180m 200m
17.12.2019 19:30	10 min	160-250m
17.12.2019 20:20	3 hours 00 min	all LiDAR data missing
17.12.2019 23:20	10 min	250m
18.12.2019 08:00	10 min	Gill data missing
18.12.2019 09:10	10 min	Gill data missing
18.12.2019 11:20	10 min	Gill data missing
18.12.2019 15:50	10 min	180m 200m
18.12.2019 17:10	10 min	40m 60m 140-250m
18.12.2019 17:20	2 hours 50 min	all LiDAR data missing
18.12.2019 20:10	10 min	200-250m
19.12.2019 03:40	10 min	Gill data missing
19.12.2019 11:20	3 hours 30 min	all LiDAR data missing
19.12.2019 19:00	10 min	250m
19.12.2019 19:20	10 min	200-250m
19.12.2019 19:30	10 min	250m
20.12.2019 03:10	3 hours 10 min	all LiDAR data missing
20.12.2019 17:30	10 min	30m 40m 60m 140m 160m 200-250m
20.12.2019 17:40	3 hours 50 min	all LiDAR data missing
21.12.2019 06:10	10 min	200m
21.12.2019 08:10	10 min	40m 80-250m
21.12.2019 08:20	2 hours 40 min	all LiDAR data missing
21.12.2019 12:10	10 min	160m
21.12.2019 19:10	3 hours 30 min	all LiDAR data missing
22.12.2019 07:20	3 hours 30 min	all LiDAR data missing
22.12.2019 13:00	10 min	180m
22.12.2019 17:20	10 min	250m
22.12.2019 17:30	10 min	160-250m
22.12.2019 17:40	10 min	200-250m
22.12.2019 18:20	10 min	180-250m
22.12.2019 18:30	10 min	160m
22.12.2019 18:40	2 hours 50 min	all LiDAR data missing
23.12.2019 04:20	3 hours 30 min	all LiDAR data missing
23.12.2019 18:50	3 hours 30 min	all LiDAR data missing
24.12.2019 03:20	10 min	Gill data missing

Table E.1: Gaps in the wind dataset of Deployment 1 in addition to those covered in the post-processing *WindResourceStatusFlags*

Start time	Duration	Missing LiDAR data at height(s) (m)
24.12.2019 08:20	10 min	180-250m
24.12.2019 08:30	2 hours 30 min	all LiDAR data missing
24.12.2019 13:10	20 min	250m
24.12.2019 13:40	10 min	200m
24.12.2019 14:00	20 min	160m 200m
24.12.2019 14:40	10 min	160m 180m 250m
24.12.2019 14:50	10 min	140m 160m 180m 250m
24.12.2019 15:00	10 min	250m
24.12.2019 17:50	10 min	160m 180m 200m
24.12.2019 18:00	10 min	250m
24.12.2019 18:20	10 min	250m
24.12.2019 18:30	10 min	200-250m
24.12.2019 18:50	10 min	140m
24.12.2019 20:40	10 min	40-250m
24.12.2019 20:50	2 hours 20 min	all LiDAR data missing
25.12.2019 00:10	10 min	160-250m
25.12.2019 00:40	10 min	180-250m
25.12.2019 00:50	10 min	250m
25.12.2019 03:20	10 min	Gill data missing
25.12.2019 04:00	10 min	250m
25.12.2019 07:20	10 min	Gill data missing
25.12.2019 13:30	10 min	Gill data missing
25.12.2019 15:20	10 min	40m 60m 80m 100m 120m 160-250m
25.12.2019 15:30	2 hours 40 min	all LiDAR data missing
26.12.2019 04:50	2 hours 40 min	all LiDAR data missing
26.12.2019 10:30	10 min	Gill data missing
26.12.2019 13:20	10 min	250m
26.12.2019 20:20	2 hours 10 min	all LiDAR data missing
27.12.2019 07:50	2 hours 30 min	all LiDAR data missing
27.12.2019 10:20	10 min	60m 100m 160m
27.12.2019 20:10	2 hours 30 min	all LiDAR data missing
27.12.2019 22:40	10 min	40m 60m 160m 180m 250m
28.12.2019 00:10	50 min	80-250m
28.12.2019 01:10	1 hours 50 min	80-250m
28.12.2019 03:00	605 hours 40 min	all LiDAR data missing

E.2 Deployment 2

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
19.06.2019 18:00	10 min	250m
19.06.2019 18:10	10 min	200-250m
19.06.2019 18:20	30 min	250m
19.06.2019 19:10	40 min	250m
19.06.2019 19:50	10 min	200-250m
19.06.2019 20:10	10 min	200-250m
19.06.2019 20:20	20 min	250m
19.06.2019 20:40	10 min	160-250m
19.06.2019 20:50	10 min	40m 160-250m
19.06.2019 21:00	10 min	120-250m
19.06.2019 21:10	10 min	140-250m
19.06.2019 21:20	40 min	250m
19.06.2019 22:00	10 min	40m 80-250m
19.06.2019 22:10	20 min	60m 120-250m
19.06.2019 22:30	10 min	120-250m
19.06.2019 22:40	10 min	160-250m
19.06.2019 22:50	20 min	200-250m
19.06.2019 23:10	10 min	250m
19.06.2019 23:20	10 min	180-250m
19.06.2019 23:30	20 min	160-250m
19.06.2019 23:50	10 min	180-250m
20.06.2019 00:00	10 min	160-250m
20.06.2019 00:10	10 min	100-250m
20.06.2019 00:20	10 min	120-250m
20.06.2019 00:30	10 min	180-250m
20.06.2019 00:40	10 min	250m
20.06.2019 01:50	20 min	80-250m
20.06.2019 02:10	10 min	160-250m
20.06.2019 02:20	10 min	120-250m
20.06.2019 02:30	1 hours 50 min	80-250m
20.06.2019 04:50	10 min	180m
20.06.2019 05:00	10 min	80-250m
20.06.2019 05:20	1 hours 50 min	80-250m
20.06.2019 07:10	10 min	40m 80-250m
20.06.2019 07:20	10 min	80m 100m 120m 180m 200m
20.06.2019 07:30	1 hours 00 min	80-250m
20.06.2019 08:30	10 min	180m
20.06.2019 09:10	10 min	80-250m
20.06.2019 09:30	20 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.06.2019 09:50	10 min	160m 200-250m
20.06.2019 10:00	20 min	80-250m
20.06.2019 12:00	10 min	Gill data missing
20.06.2019 13:00	10 min	200-250m
20.06.2019 16:10	10 min	250m
20.06.2019 16:50	20 min	250m
20.06.2019 17:20	10 min	250m
21.06.2019 18:00	10 min	Gill data missing
25.06.2019 06:10	10 min	250m
25.06.2019 06:30	10 min	250m
25.06.2019 16:40	10 min	250m
26.06.2019 01:40	10 min	140-250m
26.06.2019 01:50	10 min	60-250m
26.06.2019 02:00	20 min	40-250m
26.06.2019 02:20	10 min	100-250m
26.06.2019 02:30	10 min	40-250m
26.06.2019 02:40	10 min	40m 80-250m
26.06.2019 02:50	1 hours 40 min	40-250m
26.06.2019 04:30	10 min	40m 80-250m
26.06.2019 04:40	10 min	40-250m
26.06.2019 04:50	10 min	40m 80-250m
26.06.2019 05:00	30 min	40-250m
26.06.2019 05:30	20 min	40m 80-250m
26.06.2019 05:50	20 min	60m 120-250m
26.06.2019 06:10	30 min	120-250m
26.06.2019 06:40	20 min	40m 120-250m
26.06.2019 07:00	10 min	40m 60m 80m 120-250m
26.06.2019 07:10	10 min	120-250m
26.06.2019 07:20	10 min	60m 120-250m
26.06.2019 07:30	10 min	180-250m
26.06.2019 07:40	20 min	200-250m
26.06.2019 10:10	10 min	60m
26.06.2019 12:20	10 min	40m 200-250m
26.06.2019 12:40	10 min	40m
26.06.2019 12:50	20 min	60m 80m 200m
26.06.2019 14:40	10 min	60m
26.06.2019 15:30	10 min	40m 180m 250m
26.06.2019 16:50	10 min	40m
27.06.2019 00:50	10 min	40m 100m
27.06.2019 09:10	20 min	40m
27.06.2019 14:00	10 min	40m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
27.06.2019 14:10	10 min	40m 100m 200-250m
27.06.2019 14:40	10 min	40m
27.06.2019 15:00	10 min	40m
27.06.2019 16:00	30 min	40m
27.06.2019 17:40	10 min	40m 80m 100m 120m 140m
27.06.2019 19:30	20 min	40m
28.06.2019 00:10	10 min	160-250m
28.06.2019 00:20	10 min	80m 100m 120m 140m 160m 180m 250m
28.06.2019 01:00	10 min	200m
28.06.2019 01:40	10 min	200-250m
28.06.2019 01:50	10 min	80-250m
28.06.2019 02:10	10 min	80m 200m
28.06.2019 02:30	10 min	80m 120m 160m 180m 200m
28.06.2019 02:40	10 min	160m 180m 200m
28.06.2019 02:50	10 min	200m
28.06.2019 03:00	10 min	80-250m
28.06.2019 03:20	10 min	140m 180m 250m
28.06.2019 03:40	10 min	160-250m
28.06.2019 03:50	20 min	140m 200m
28.06.2019 04:10	20 min	160-250m
28.06.2019 04:30	10 min	80m 100m 120m 160m 180m 250m
28.06.2019 04:40	10 min	120m 180-250m
28.06.2019 04:50	10 min	80-250m
28.06.2019 05:10	10 min	200m
28.06.2019 05:30	20 min	180m
28.06.2019 06:00	10 min	100-250m
28.06.2019 06:10	10 min	250m
28.06.2019 07:00	10 min	120m 160-250m
28.06.2019 07:10	10 min	180m
28.06.2019 07:20	20 min	80-250m
28.06.2019 08:00	10 min	80-250m
28.06.2019 08:50	20 min	80-250m
28.06.2019 10:10	40 min	80-250m
28.06.2019 11:40	10 min	120m 160m 200-250m
28.06.2019 11:50	20 min	80-250m
28.06.2019 12:10	10 min	120m 160m 200m
28.06.2019 12:20	10 min	180m 200m
28.06.2019 12:30	10 min	250m
28.06.2019 13:10	20 min	80-250m
28.06.2019 13:40	40 min	80-250m
28.06.2019 14:50	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
28.06.2019 15:00	10 min	200m
28.06.2019 15:20	10 min	80-250m
28.06.2019 15:40	10 min	80-250m
28.06.2019 16:00	10 min	80-250m
28.06.2019 19:00	10 min	100m
29.06.2019 08:10	10 min	200m
02.07.2019 10:20	10 min	40m 60m 80m 100m 140m 180m 200m
04.07.2019 17:00	10 min	Gill data missing
05.07.2019 05:50	20 min	60m
05.07.2019 11:20	10 min	40m
05.07.2019 15:40	10 min	40m
05.07.2019 15:50	10 min	40m 80m 180m 250m
05.07.2019 16:00	10 min	200m
05.07.2019 20:30	20 min	180m
05.07.2019 22:10	10 min	250m
05.07.2019 22:50	10 min	200m
05.07.2019 23:30	10 min	250m
06.07.2019 00:20	10 min	200-250m
06.07.2019 00:30	10 min	200m
06.07.2019 01:00	10 min	180m 250m
06.07.2019 05:30	10 min	250m
06.07.2019 12:20	10 min	Gill data missing
07.07.2019 04:10	10 min	Gill data missing
08.07.2019 10:10	10 min	Gill data missing
10.07.2019 08:50	10 min	250m
10.07.2019 16:20	10 min	160m 250m
10.07.2019 16:30	10 min	120-250m
10.07.2019 17:00	10 min	120m 160-250m
10.07.2019 17:10	10 min	120-250m
10.07.2019 17:40	10 min	120-250m
10.07.2019 17:50	10 min	140-250m
10.07.2019 22:50	10 min	250m
10.07.2019 23:20	10 min	140-250m
11.07.2019 00:30	10 min	100-250m
11.07.2019 00:40	10 min	120-250m
11.07.2019 01:40	10 min	160-250m
11.07.2019 01:50	10 min	180-250m
11.07.2019 02:00	20 min	250m
11.07.2019 02:30	20 min	80-250m
11.07.2019 02:50	10 min	160-250m
11.07.2019 03:00	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.07.2019 04:00	10 min	160-250m
11.07.2019 04:10	20 min	80m 120-250m
11.07.2019 04:30	10 min	80-250m
11.07.2019 04:40	10 min	120-250m
11.07.2019 04:50	10 min	100-250m
11.07.2019 05:00	10 min	140-250m
11.07.2019 05:10	10 min	160-250m
11.07.2019 05:20	10 min	200-250m
11.07.2019 05:30	10 min	250m
11.07.2019 05:40	10 min	200-250m
11.07.2019 05:50	20 min	80-250m
11.07.2019 06:10	10 min	120-250m
11.07.2019 06:20	10 min	160-250m
11.07.2019 06:30	10 min	120-250m
11.07.2019 06:40	10 min	120m 140m 160m 180m 200m
11.07.2019 06:50	20 min	160-250m
11.07.2019 08:10	10 min	80m 100m 120m 140m 160m 200-250m
11.07.2019 09:30	10 min	200m
11.07.2019 10:10	10 min	200-250m
11.07.2019 13:20	10 min	160-250m
11.07.2019 13:30	10 min	140-250m
11.07.2019 13:40	10 min	140m 200-250m
11.07.2019 13:50	10 min	180m 250m
11.07.2019 14:10	10 min	200-250m
11.07.2019 14:20	10 min	100-250m
11.07.2019 14:30	30 min	200-250m
11.07.2019 15:00	10 min	140-250m
11.07.2019 15:10	30 min	120-250m
11.07.2019 15:40	10 min	100-250m
11.07.2019 15:50	10 min	140-250m
11.07.2019 16:00	10 min	160-250m
11.07.2019 16:50	10 min	100m 120m 140m 160m 180m
11.07.2019 17:30	10 min	80-250m
11.07.2019 20:10	10 min	120-250m
11.07.2019 20:20	20 min	80-250m
11.07.2019 20:40	20 min	120-250m
11.07.2019 21:00	10 min	100-250m
11.07.2019 22:00	10 min	100m 140-250m
11.07.2019 22:10	10 min	80-250m
11.07.2019 22:30	10 min	100m 120m 160-250m
11.07.2019 22:40	10 min	160-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.07.2019 22:50	10 min	140-250m
11.07.2019 23:00	10 min	100m 120m 140m 180m
11.07.2019 23:10	10 min	120m 160-250m
11.07.2019 23:40	10 min	120m 140m
11.07.2019 23:50	20 min	100-250m
12.07.2019 00:10	10 min	160m
12.07.2019 00:20	10 min	120-250m
12.07.2019 00:40	10 min	100-250m
12.07.2019 00:50	10 min	80-250m
12.07.2019 01:00	10 min	100-250m
12.07.2019 01:10	2 hours 10 min	120-250m
12.07.2019 03:20	10 min	30m 60-250m
12.07.2019 03:30	40 min	80m 100m 120m 140m 160m 180m 200m
12.07.2019 04:20	10 min	40m 60m 80m 250m
12.07.2019 04:30	10 min	40m 60m
12.07.2019 04:40	10 min	250m
12.07.2019 04:50	40 min	all LiDAR data missing
12.07.2019 05:30	20 min	30m
12.07.2019 05:50	20 min	30m 40m 60m 80m 100m
12.07.2019 06:10	10 min	60m 100m 120m 140m
12.07.2019 06:20	10 min	30m 40m 60m 80m 100m
12.07.2019 06:30	10 min	40m 60m 80m 100m
12.07.2019 06:40	10 min	60-250m
12.07.2019 06:50	10 min	100-250m
12.07.2019 07:00	10 min	120-250m
12.07.2019 07:10	10 min	30m 100-250m
12.07.2019 07:20	20 min	all LiDAR data missing
12.07.2019 07:40	10 min	200-250m
12.07.2019 07:50	10 min	100m 140m 160m 250m
12.07.2019 09:10	10 min	Gill data missing
12.07.2019 09:30	10 min	140m 160m 200m
12.07.2019 14:10	10 min	100-250m
12.07.2019 14:30	10 min	200-250m
12.07.2019 14:50	10 min	160-250m
12.07.2019 15:00	10 min	140-250m
12.07.2019 15:20	20 min	200m
12.07.2019 16:10	10 min	160-250m
12.07.2019 16:20	10 min	180-250m
12.07.2019 17:20	10 min	140m 180m
12.07.2019 20:10	20 min	120m
12.07.2019 20:30	10 min	40m 80m 120m 200m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
12.07.2019 21:00	10 min	200m
12.07.2019 21:30	10 min	120m
12.07.2019 23:20	10 min	40m 250m
13.07.2019 00:00	10 min	120m 250m
13.07.2019 00:10	10 min	80-250m
13.07.2019 00:20	10 min	40m 80-250m
13.07.2019 00:30	10 min	80-250m
13.07.2019 00:40	10 min	100-250m
13.07.2019 00:50	10 min	160m 200-250m
13.07.2019 01:00	10 min	140m 180-250m
13.07.2019 01:10	10 min	180m 200m
13.07.2019 01:20	30 min	160m 180m 200m
13.07.2019 01:50	10 min	100-250m
13.07.2019 02:00	10 min	120m 200m
13.07.2019 02:10	10 min	80-250m
13.07.2019 02:20	10 min	140m 160m 180m 200m
13.07.2019 02:30	30 min	80-250m
13.07.2019 03:00	10 min	100m
13.07.2019 03:20	10 min	250m
13.07.2019 03:30	20 min	80-250m
13.07.2019 03:50	30 min	80m 120-250m
13.07.2019 04:20	10 min	160m 180m
13.07.2019 04:30	1 hours 20 min	80-250m
13.07.2019 05:50	10 min	40m 80-250m
13.07.2019 06:00	20 min	100-250m
13.07.2019 06:20	10 min	250m
13.07.2019 06:30	10 min	200-250m
13.07.2019 06:40	10 min	250m
13.07.2019 07:10	10 min	80-250m
13.07.2019 07:20	10 min	40m 80-250m
13.07.2019 07:30	10 min	200m
13.07.2019 07:40	30 min	80-250m
13.07.2019 08:20	10 min	80-250m
13.07.2019 08:30	10 min	80m 100m 120m 200-250m
13.07.2019 08:40	10 min	40m 80-250m
13.07.2019 08:50	10 min	80-250m
13.07.2019 09:00	10 min	100m 180-250m
13.07.2019 09:20	10 min	100m 200-250m
13.07.2019 09:30	10 min	80m 250m
13.07.2019 09:50	10 min	80-250m
13.07.2019 10:10	20 min	80m 200m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
13.07.2019 10:30	10 min	180-250m
13.07.2019 12:20	10 min	80-250m
13.07.2019 12:40	10 min	80m 120m 140m 180m 200m
13.07.2019 12:50	10 min	40m 80-250m
13.07.2019 13:00	10 min	80-250m
13.07.2019 13:10	10 min	40m 80-250m
13.07.2019 13:20	10 min	80-250m
13.07.2019 13:30	10 min	160m 200-250m
13.07.2019 13:40	10 min	80-250m
13.07.2019 13:50	10 min	40m 80-250m
13.07.2019 14:00	10 min	100-250m
13.07.2019 14:10	10 min	80m 140-250m
13.07.2019 14:20	20 min	80-250m
13.07.2019 14:50	10 min	80-250m
13.07.2019 15:00	10 min	200m
13.07.2019 15:20	10 min	80m 120m 140m 160m 200-250m
13.07.2019 15:30	10 min	160-250m
13.07.2019 16:00	10 min	120m 180-250m
13.07.2019 16:10	10 min	80m 120m 160-250m
13.07.2019 16:20	20 min	40m 80-250m
13.07.2019 16:40	10 min	80m 100m 120m 140m
13.07.2019 16:50	10 min	40m 80-250m
13.07.2019 17:00	10 min	80-250m
13.07.2019 17:10	10 min	80m 100m 120m 140m 160m 180m 200m
13.07.2019 17:20	20 min	40m 80-250m
13.07.2019 17:40	10 min	80-250m
13.07.2019 18:10	10 min	80-250m
13.07.2019 18:20	10 min	80m
13.07.2019 18:30	10 min	40m 80-250m
13.07.2019 18:40	20 min	80-250m
13.07.2019 19:00	10 min	40m 80-250m
13.07.2019 19:10	10 min	120m 250m
13.07.2019 19:20	10 min	80m 100m 200m
13.07.2019 19:40	10 min	80-250m
13.07.2019 19:50	10 min	80m 100m 120m
13.07.2019 20:00	10 min	80m 250m
13.07.2019 20:10	10 min	80m 100m 250m
13.07.2019 20:20	10 min	40m 80-250m
13.07.2019 20:30	10 min	80m 140-250m
13.07.2019 20:40	10 min	120m 160m 200-250m
13.07.2019 21:00	10 min	100m 140m 180-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
13.07.2019 21:10	10 min	80m 120-250m
13.07.2019 21:30	10 min	200m
13.07.2019 23:00	10 min	40m 80-250m
13.07.2019 23:20	10 min	100m
13.07.2019 23:30	10 min	200-250m
14.07.2019 00:00	10 min	250m
14.07.2019 08:30	10 min	40m
14.07.2019 08:50	10 min	40m 200-250m
14.07.2019 15:10	10 min	40m
14.07.2019 16:00	10 min	40m
14.07.2019 16:10	10 min	40m 200m
14.07.2019 16:20	20 min	40m
14.07.2019 16:50	10 min	40m 80-250m
14.07.2019 18:20	10 min	40m 80m 140m
14.07.2019 18:40	10 min	40m
14.07.2019 18:50	10 min	40m 60m 200-250m
14.07.2019 19:00	10 min	40m 160m 250m
14.07.2019 19:10	10 min	40m
15.07.2019 01:00	10 min	80m 100m
15.07.2019 01:50	10 min	80m 200m
15.07.2019 04:30	10 min	80m 140m
15.07.2019 05:10	10 min	40m 80-250m
15.07.2019 05:30	10 min	80m 100m 140-250m
15.07.2019 06:00	10 min	250m
15.07.2019 06:10	10 min	60m 250m
15.07.2019 07:40	10 min	80m 100m 120m 140m
15.07.2019 08:30	10 min	80-250m
15.07.2019 09:50	10 min	80m 200m
15.07.2019 10:20	20 min	180m 250m
15.07.2019 11:00	10 min	160m
15.07.2019 12:00	10 min	80m 100m 250m
15.07.2019 14:20	10 min	100m 180-250m
15.07.2019 15:40	10 min	250m
15.07.2019 15:50	10 min	40m 180-250m
15.07.2019 16:10	10 min	100m 200m
15.07.2019 16:20	10 min	180-250m
15.07.2019 17:10	10 min	180-250m
15.07.2019 17:20	10 min	80-250m
15.07.2019 17:30	10 min	40m 80-250m
15.07.2019 17:40	10 min	250m
15.07.2019 17:50	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
15.07.2019 18:00	10 min	40m 80-250m
15.07.2019 18:10	10 min	80m 160-250m
15.07.2019 18:20	10 min	40m 80m 100m 120m 140m 160m 200m
15.07.2019 18:30	10 min	120m
15.07.2019 18:40	20 min	80m 140m 160m 180m 200m
15.07.2019 19:10	10 min	250m
15.07.2019 19:20	10 min	120m 160m 180m
15.07.2019 19:30	10 min	200-250m
15.07.2019 19:40	10 min	100m 200-250m
15.07.2019 19:50	10 min	80m 100m 120m 180-250m
15.07.2019 20:00	10 min	80m
15.07.2019 20:10	10 min	80-250m
15.07.2019 20:20	10 min	160-250m
15.07.2019 20:30	20 min	180m 200m
15.07.2019 20:50	10 min	80-250m
15.07.2019 21:00	10 min	100m 140m 180m 200m
15.07.2019 21:20	10 min	80m 120m 140m 160m 200-250m
15.07.2019 21:30	10 min	80-250m
15.07.2019 21:40	10 min	200m
15.07.2019 22:30	10 min	180m 200m
15.07.2019 22:40	10 min	80-250m
15.07.2019 22:50	10 min	80m 100m 120m 160-250m
15.07.2019 23:00	10 min	120m 140m 160m 180m 200m
15.07.2019 23:30	10 min	250m
16.07.2019 00:10	20 min	80-250m
16.07.2019 00:30	10 min	80m 140-250m
16.07.2019 00:40	20 min	80-250m
16.07.2019 01:00	10 min	250m
16.07.2019 01:10	10 min	80-250m
16.07.2019 01:30	10 min	160-250m
16.07.2019 01:50	10 min	80-250m
16.07.2019 02:00	10 min	100m 120m 160-250m
16.07.2019 02:10	10 min	80-250m
16.07.2019 02:20	10 min	140-250m
16.07.2019 02:50	10 min	80-250m
16.07.2019 03:20	10 min	80-250m
16.07.2019 03:40	20 min	80-250m
16.07.2019 04:10	10 min	80m 120-250m
16.07.2019 04:20	10 min	80-250m
16.07.2019 04:30	10 min	120m
16.07.2019 04:40	10 min	120-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.07.2019 04:50	10 min	80-250m
16.07.2019 05:00	10 min	80m 120m 140m 160m 200-250m
16.07.2019 05:10	40 min	80-250m
16.07.2019 05:50	10 min	40m 80-250m
16.07.2019 06:00	30 min	80-250m
16.07.2019 06:30	10 min	120-250m
16.07.2019 06:40	1 hours 30 min	80-250m
16.07.2019 08:10	10 min	120m 140m 250m
16.07.2019 08:20	10 min	100-250m
16.07.2019 08:30	20 min	80-250m
16.07.2019 08:50	10 min	120m 140m 160m 180m 200m
16.07.2019 09:00	20 min	80-250m
16.07.2019 09:20	10 min	120m 140m 160m
16.07.2019 09:30	10 min	80-250m
16.07.2019 09:40	10 min	80m 100m 120m 160m 200-250m
16.07.2019 09:50	10 min	80-250m
16.07.2019 10:10	40 min	80-250m
16.07.2019 10:50	10 min	80m 100m 120m 160m 180m 250m
16.07.2019 11:00	20 min	80-250m
16.07.2019 11:20	10 min	80m 160m 200-250m
16.07.2019 11:40	10 min	120-250m
16.07.2019 11:50	10 min	200m
16.07.2019 12:10	20 min	80-250m
16.07.2019 12:30	10 min	120-250m
16.07.2019 12:40	20 min	80-250m
16.07.2019 13:10	30 min	80-250m
16.07.2019 13:40	10 min	250m
16.07.2019 13:50	10 min	160-250m
16.07.2019 14:00	20 min	80-250m
16.07.2019 14:40	10 min	80-250m
16.07.2019 14:50	10 min	180m 250m
16.07.2019 15:00	10 min	80-250m
16.07.2019 15:20	10 min	80-250m
16.07.2019 15:30	20 min	250m
16.07.2019 15:50	10 min	100-250m
16.07.2019 16:00	10 min	200m
16.07.2019 16:50	10 min	80-250m
16.07.2019 17:30	10 min	100m 160-250m
16.07.2019 17:50	10 min	100m 180-250m
16.07.2019 18:00	20 min	80-250m
16.07.2019 18:30	20 min	250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.07.2019 18:50	10 min	80-250m
16.07.2019 19:00	10 min	80m 100m 140m 160m
16.07.2019 19:10	10 min	80-250m
16.07.2019 19:40	10 min	40m 80-250m
16.07.2019 19:50	30 min	80-250m
16.07.2019 20:20	20 min	40-250m
16.07.2019 20:40	10 min	80-250m
16.07.2019 20:50	10 min	250m
16.07.2019 21:10	30 min	30m 40m 80-250m
16.07.2019 21:50	10 min	30m 40m 80-250m
16.07.2019 22:50	10 min	30m 40m 80-250m
16.07.2019 23:30	10 min	250m
16.07.2019 23:40	10 min	60-250m
16.07.2019 23:50	10 min	30m 40m 80-250m
17.07.2019 00:00	10 min	all LiDAR data missing
17.07.2019 00:10	20 min	40-250m
17.07.2019 00:30	1 hours 30 min	all LiDAR data missing
17.07.2019 02:00	10 min	40m 80-250m
17.07.2019 02:10	20 min	30m 40m 80-250m
17.07.2019 02:30	20 min	all LiDAR data missing
17.07.2019 02:50	20 min	30m 40m 80-250m
17.07.2019 03:10	30 min	all LiDAR data missing
17.07.2019 03:40	10 min	80-250m
17.07.2019 04:10	10 min	100m 120m 140m 180m
17.07.2019 04:50	10 min	160m
17.07.2019 11:10	10 min	200m
17.07.2019 11:30	10 min	250m
18.07.2019 15:20	10 min	Gill data missing
18.07.2019 18:00	10 min	Gill data missing
18.07.2019 21:30	10 min	40m 80m 100m 120m 140m 160m 200-250m
18.07.2019 21:50	10 min	Gill data missing
18.07.2019 23:30	20 min	160-250m
19.07.2019 01:10	10 min	180m 250m
20.07.2019 01:10	10 min	250m
20.07.2019 06:30	10 min	200-250m
20.07.2019 06:40	20 min	250m
20.07.2019 07:00	10 min	200-250m
20.07.2019 07:10	10 min	250m
20.07.2019 07:30	20 min	180-250m
20.07.2019 07:50	10 min	120-250m
20.07.2019 20:10	20 min	250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.07.2019 21:10	30 min	250m
21.07.2019 07:50	10 min	200m
21.07.2019 10:00	10 min	40m 250m
21.07.2019 11:10	10 min	Gill data missing
21.07.2019 19:00	10 min	250m
21.07.2019 19:20	10 min	180-250m
21.07.2019 19:30	10 min	250m
21.07.2019 19:40	10 min	200-250m
21.07.2019 19:50	10 min	250m
22.07.2019 18:20	20 min	250m
22.07.2019 18:50	50 min	250m
22.07.2019 19:50	1 hours 50 min	250m
22.07.2019 21:40	30 min	200-250m
22.07.2019 22:10	30 min	180-250m
22.07.2019 22:40	10 min	160-250m
22.07.2019 22:50	20 min	180-250m
22.07.2019 23:10	30 min	250m
22.07.2019 23:50	10 min	250m
23.07.2019 00:20	20 min	180-250m
23.07.2019 03:50	10 min	250m
23.07.2019 07:10	10 min	250m
23.07.2019 07:20	20 min	200-250m
23.07.2019 07:40	30 min	250m
23.07.2019 19:30	20 min	250m
23.07.2019 20:10	1 hours 30 min	250m
25.07.2019 01:30	10 min	250m
25.07.2019 04:40	50 min	250m
26.07.2019 05:50	10 min	Gill data missing
28.07.2019 23:30	10 min	140-250m
28.07.2019 23:40	10 min	200-250m
28.07.2019 23:50	10 min	100-250m
29.07.2019 00:00	10 min	60m 100-250m
29.07.2019 00:10	10 min	80m 100m 120m 140m 160m 200-250m
29.07.2019 00:20	10 min	120m 140m 160m 180m 250m
29.07.2019 00:30	1 hours 30 min	80-250m
29.07.2019 02:00	20 min	100-250m
29.07.2019 02:20	2 hours 00 min	80-250m
29.07.2019 04:20	10 min	40m 80-250m
29.07.2019 04:30	40 min	80-250m
29.07.2019 05:20	10 min	250m
29.07.2019 05:50	30 min	250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
29.07.2019 17:00	10 min	Gill data missing
30.07.2019 21:50	20 min	250m
31.07.2019 11:50	10 min	250m
31.07.2019 20:40	10 min	Gill data missing
01.08.2019 00:40	10 min	80-250m
01.08.2019 00:50	20 min	100m 120m 180m
01.08.2019 02:00	10 min	160m 180m 200m
01.08.2019 02:10	10 min	80m 100m 120m 140m 160m
01.08.2019 03:30	20 min	60-250m
01.08.2019 04:00	10 min	80-250m
01.08.2019 04:20	10 min	80-250m
01.08.2019 04:30	30 min	250m
01.08.2019 05:00	20 min	80-250m
01.08.2019 05:20	10 min	100-250m
01.08.2019 05:30	10 min	250m
01.08.2019 05:40	10 min	80-250m
01.08.2019 05:50	10 min	120m 160-250m
01.08.2019 06:00	10 min	80-250m
01.08.2019 06:10	10 min	120-250m
01.08.2019 06:20	1 hours 50 min	80-250m
01.08.2019 11:40	10 min	80m 100m 120m 140m 200-250m
01.08.2019 17:20	10 min	80-250m
01.08.2019 22:50	10 min	80m 180m 250m
02.08.2019 03:00	10 min	250m
02.08.2019 03:20	10 min	Gill data missing
02.08.2019 08:00	20 min	250m
02.08.2019 08:40	10 min	250m
02.08.2019 11:20	10 min	250m
02.08.2019 14:30	10 min	250m
03.08.2019 00:10	10 min	100-250m
03.08.2019 00:40	10 min	80-250m
03.08.2019 04:50	20 min	80-250m
03.08.2019 05:20	10 min	100m 160m 200m
03.08.2019 05:50	10 min	140-250m
04.08.2019 02:00	20 min	250m
04.08.2019 02:50	10 min	250m
04.08.2019 04:30	10 min	250m
04.08.2019 04:50	20 min	250m
04.08.2019 05:40	10 min	250m
04.08.2019 06:10	10 min	250m
04.08.2019 06:30	10 min	160-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.08.2019 07:00	10 min	250m
04.08.2019 07:10	10 min	160m 180m 250m
04.08.2019 07:20	10 min	250m
04.08.2019 17:00	10 min	Gill data missing
05.08.2019 02:50	10 min	Gill data missing
05.08.2019 11:00	10 min	140-250m
05.08.2019 11:10	10 min	120-250m
05.08.2019 11:20	10 min	100-250m
05.08.2019 11:30	10 min	140-250m
05.08.2019 16:50	10 min	Gill data missing
05.08.2019 19:10	10 min	Gill data missing
06.08.2019 17:00	10 min	Gill data missing
06.08.2019 18:40	10 min	Gill data missing
09.08.2019 16:50	10 min	250m
12.08.2019 00:50	10 min	60m 140m 180m 250m
12.08.2019 01:20	10 min	250m
12.08.2019 14:10	10 min	40m
12.08.2019 23:10	10 min	80-250m
13.08.2019 19:30	10 min	140m 200-250m
14.08.2019 18:30	10 min	140-250m
15.08.2019 00:10	20 min	200-250m
15.08.2019 00:30	10 min	160-250m
15.08.2019 00:50	10 min	180m 250m
15.08.2019 01:00	10 min	200m
15.08.2019 01:20	10 min	180-250m
15.08.2019 01:30	10 min	250m
15.08.2019 02:40	10 min	200m
15.08.2019 02:50	10 min	200-250m
15.08.2019 03:00	10 min	160-250m
15.08.2019 03:20	20 min	160m
15.08.2019 03:50	10 min	120m 140m
15.08.2019 04:00	10 min	100-250m
15.08.2019 04:10	10 min	140-250m
15.08.2019 04:20	10 min	80m 140-250m
15.08.2019 04:40	10 min	80-250m
15.08.2019 04:50	10 min	160m 200-250m
15.08.2019 05:20	10 min	80-250m
15.08.2019 06:30	10 min	80-250m
15.08.2019 06:40	10 min	160-250m
15.08.2019 06:50	10 min	80-250m
15.08.2019 07:00	10 min	140m 160m 180m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
15.08.2019 08:00	10 min	100-250m
15.08.2019 08:10	10 min	80-250m
15.08.2019 08:20	10 min	80m 100m 120m 140m 250m
15.08.2019 08:30	10 min	80-250m
15.08.2019 08:40	10 min	100-250m
15.08.2019 09:10	10 min	140-250m
15.08.2019 09:20	10 min	180-250m
15.08.2019 09:30	10 min	80m 100m 140-250m
15.08.2019 09:40	20 min	40m 80-250m
15.08.2019 10:00	20 min	80-250m
15.08.2019 10:20	10 min	250m
15.08.2019 10:30	20 min	80-250m
15.08.2019 10:50	10 min	140m 180-250m
15.08.2019 11:00	10 min	200-250m
15.08.2019 11:10	10 min	80-250m
15.08.2019 11:20	10 min	80m 100m 120m 140m 160m 200-250m
15.08.2019 11:30	20 min	80-250m
15.08.2019 12:10	10 min	80m 100m 120m 160m 250m
15.08.2019 14:10	10 min	200m
16.08.2019 08:50	10 min	Gill data missing
18.08.2019 04:40	30 min	80-250m
18.08.2019 06:50	10 min	200-250m
18.08.2019 07:10	10 min	80-250m
18.08.2019 08:10	10 min	250m
18.08.2019 08:30	10 min	80m 100m 140m 160m 180m 250m
19.08.2019 03:20	10 min	Gill data missing
20.08.2019 12:30	20 min	Gill data missing
20.08.2019 17:30	10 min	Gill data missing
20.08.2019 18:10	10 min	Gill data missing
20.08.2019 23:00	10 min	Gill data missing
22.08.2019 18:10	10 min	Gill data missing
23.08.2019 17:50	10 min	250m
23.08.2019 18:00	10 min	200-250m
23.08.2019 18:10	10 min	180-250m
23.08.2019 18:20	20 min	200-250m
23.08.2019 19:10	10 min	250m
27.08.2019 08:10	10 min	Gill data missing
27.08.2019 08:30	10 min	Gill data missing
27.08.2019 21:50	10 min	Gill data missing
28.08.2019 09:40	10 min	Gill data missing
28.08.2019 14:30	20 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
28.08.2019 15:00	20 min	80-250m
28.08.2019 15:20	10 min	120-250m
28.08.2019 15:30	10 min	250m
28.08.2019 17:40	10 min	250m
28.08.2019 17:50	10 min	180-250m
28.08.2019 18:00	10 min	160-250m
28.08.2019 18:10	10 min	200-250m
28.08.2019 18:20	10 min	250m
29.08.2019 03:00	10 min	250m
29.08.2019 03:20	10 min	250m
29.08.2019 07:20	10 min	250m
29.08.2019 12:30	10 min	Gill data missing
29.08.2019 14:20	10 min	Gill data missing
29.08.2019 14:50	10 min	250m
30.08.2019 05:40	10 min	Gill data missing
30.08.2019 14:20	10 min	Gill data missing
30.08.2019 15:00	10 min	Gill data missing
31.08.2019 12:20	10 min	Gill data missing
01.09.2019 00:40	10 min	80-250m
01.09.2019 16:50	10 min	Gill data missing
02.09.2019 14:30	10 min	Gill data missing
03.09.2019 09:30	10 min	Gill data missing
04.09.2019 05:20	10 min	140m 200-250m
04.09.2019 07:20	10 min	160-250m
04.09.2019 07:40	20 min	200-250m
04.09.2019 08:00	10 min	250m
04.09.2019 09:40	10 min	200-250m
04.09.2019 09:50	10 min	180-250m
04.09.2019 10:00	10 min	200-250m
04.09.2019 10:10	10 min	180m
04.09.2019 10:20	10 min	120-250m
04.09.2019 10:30	10 min	250m
04.09.2019 10:50	10 min	180-250m
04.09.2019 11:00	10 min	250m
04.09.2019 11:20	10 min	250m
04.09.2019 11:30	10 min	180-250m
04.09.2019 11:50	10 min	160m 180m
04.09.2019 12:10	10 min	160m 200-250m
04.09.2019 12:20	10 min	160m 250m
05.09.2019 22:00	10 min	Gill data missing
05.09.2019 23:30	10 min	Gill data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
06.09.2019 06:00	10 min	Gill data missing
06.09.2019 17:30	10 min	250m
07.09.2019 08:20	10 min	Gill data missing
07.09.2019 14:10	10 min	200-250m
07.09.2019 14:20	10 min	40m 80m 120m 200-250m
07.09.2019 20:20	10 min	Gill data missing
09.09.2019 07:00	10 min	250m
10.09.2019 00:00	10 min	Gill data missing
13.09.2019 20:00	10 min	Gill data missing
14.09.2019 16:40	10 min	Gill data missing
14.09.2019 18:10	10 min	Gill data missing
14.09.2019 18:50	10 min	all LiDAR data missing
14.09.2019 21:40	10 min	all LiDAR data missing
15.09.2019 08:10	10 min	40m 60m
15.09.2019 10:40	10 min	60m
16.09.2019 08:10	10 min	250m
16.09.2019 09:10	10 min	60m
17.09.2019 08:10	10 min	30m 40m 60m 80m 100m 120m 140m 180m
17.09.2019 09:00	10 min	Gill data missing
18.09.2019 16:20	10 min	Gill data missing
20.09.2019 06:10	10 min	60m 100m 160m 180m
20.09.2019 06:40	10 min	80m 200-250m
20.09.2019 08:10	10 min	160m
20.09.2019 08:40	10 min	Gill data missing
20.09.2019 11:40	10 min	Gill data missing
21.09.2019 01:20	10 min	250m
21.09.2019 01:40	10 min	Gill data missing
21.09.2019 05:50	10 min	Gill data missing
23.09.2019 00:30	10 min	140-250m
23.09.2019 00:40	10 min	160-250m
23.09.2019 00:50	10 min	180m 250m
23.09.2019 01:00	10 min	140m 180-250m
23.09.2019 01:20	30 min	80-250m
23.09.2019 01:50	10 min	40m 80-250m
23.09.2019 02:00	10 min	160-250m
23.09.2019 02:10	10 min	180-250m
23.09.2019 02:20	10 min	250m
23.09.2019 02:40	10 min	200m
23.09.2019 03:40	40 min	250m
23.09.2019 09:30	10 min	140m 180-250m
23.09.2019 09:40	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
23.09.2019 09:50	10 min	80m 120-250m
23.09.2019 10:00	10 min	120-250m
23.09.2019 10:10	10 min	160-250m
23.09.2019 10:20	10 min	140-250m
23.09.2019 10:40	10 min	160m 200-250m
23.09.2019 13:40	10 min	140-250m
23.09.2019 13:50	20 min	80-250m
23.09.2019 16:10	10 min	250m
23.09.2019 16:20	10 min	100m 160m
23.09.2019 16:40	10 min	Gill data missing
24.09.2019 13:40	10 min	30m 40m 60m 120-250m
25.09.2019 02:00	10 min	40m 160-250m
25.09.2019 02:10	10 min	200m
25.09.2019 05:10	10 min	40m
25.09.2019 05:20	10 min	Gill data missing
25.09.2019 06:40	10 min	40m 80m 200m
25.09.2019 07:00	10 min	40m 80-250m
25.09.2019 07:10	10 min	40m 80m 140-250m
25.09.2019 07:20	10 min	40m 160m
25.09.2019 08:30	10 min	250m
25.09.2019 08:50	10 min	250m
25.09.2019 11:20	10 min	40m
25.09.2019 13:30	10 min	180m
25.09.2019 22:30	10 min	40m 250m
25.09.2019 23:50	10 min	180m
26.09.2019 00:10	40 min	80-250m
26.09.2019 01:00	30 min	80-250m
26.09.2019 01:30	10 min	160-250m
26.09.2019 01:40	20 min	160m 180m 200m
26.09.2019 02:00	10 min	160m
26.09.2019 02:10	10 min	100m 120m 140m 180m 250m
26.09.2019 02:20	10 min	80-250m
26.09.2019 02:30	10 min	80m 100m 140m 160m 200-250m
26.09.2019 02:40	20 min	80-250m
26.09.2019 03:20	30 min	80-250m
26.09.2019 03:50	10 min	160m
26.09.2019 04:20	10 min	200-250m
26.09.2019 04:50	10 min	80-250m
26.09.2019 05:10	20 min	80-250m
26.09.2019 05:30	10 min	80m 100m 120m 140m 160m 180m 250m
26.09.2019 05:40	10 min	40m 80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
26.09.2019 05:50	10 min	120m 140m
26.09.2019 06:00	20 min	80-250m
26.09.2019 06:20	10 min	100-250m
26.09.2019 06:30	10 min	80-250m
26.09.2019 06:40	10 min	80m 160-250m
26.09.2019 07:00	10 min	80-250m
26.09.2019 07:10	10 min	120m 180-250m
26.09.2019 07:20	50 min	80-250m
26.09.2019 08:10	10 min	200-250m
26.09.2019 08:20	40 min	80-250m
26.09.2019 09:10	10 min	250m
26.09.2019 09:20	10 min	140m 200-250m
26.09.2019 09:30	50 min	80-250m
26.09.2019 10:20	10 min	250m
26.09.2019 10:30	10 min	200-250m
26.09.2019 10:40	30 min	80-250m
26.09.2019 11:10	10 min	100-250m
26.09.2019 11:20	10 min	80-250m
26.09.2019 11:30	10 min	160-250m
26.09.2019 11:40	10 min	160m 180m 200m
26.09.2019 11:50	10 min	180m
26.09.2019 12:00	10 min	160m 180m
26.09.2019 12:10	10 min	120-250m
26.09.2019 12:20	10 min	120m 140m 160m 180m 200m
26.09.2019 12:30	10 min	100-250m
26.09.2019 12:40	10 min	120m 140m 160m 180m 200m
26.09.2019 12:50	10 min	140m
26.09.2019 13:00	10 min	120m 180m 250m
26.09.2019 13:10	10 min	100m 120m
26.09.2019 13:30	10 min	120-250m
26.09.2019 13:40	10 min	120m 140m
26.09.2019 13:50	10 min	120m
26.09.2019 14:00	10 min	120m 180m
26.09.2019 14:10	10 min	120m 140m 160m
26.09.2019 14:20	10 min	120m 160m 180m 200m
26.09.2019 14:30	10 min	80-250m
26.09.2019 14:40	10 min	120-250m
26.09.2019 14:50	10 min	80-250m
26.09.2019 15:00	10 min	140-250m
26.09.2019 15:10	10 min	200-250m
26.09.2019 15:20	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
26.09.2019 15:30	10 min	180m
26.09.2019 15:50	10 min	250m
26.09.2019 16:00	20 min	200-250m
26.09.2019 16:20	10 min	250m
26.09.2019 16:40	10 min	200-250m
26.09.2019 16:50	10 min	80-250m
26.09.2019 17:00	20 min	80m 120-250m
26.09.2019 17:20	10 min	120m 140m 160m 200m
26.09.2019 17:30	10 min	80-250m
26.09.2019 17:40	10 min	120-250m
26.09.2019 17:50	10 min	80-250m
26.09.2019 18:00	10 min	200m
26.09.2019 19:30	10 min	200m
26.09.2019 20:40	10 min	140m 180m 200m
27.09.2019 06:00	10 min	Gill data missing
27.09.2019 18:00	10 min	140-250m
28.09.2019 03:10	10 min	Gill data missing
28.09.2019 11:50	10 min	80m 100m 120m 140m 180-250m
28.09.2019 12:10	10 min	80-250m
28.09.2019 15:00	10 min	140-250m
28.09.2019 15:10	10 min	250m
29.09.2019 05:40	10 min	Gill data missing
29.09.2019 14:00	10 min	Gill data missing
29.09.2019 22:40	10 min	160m 200-250m
29.09.2019 23:00	10 min	250m
30.09.2019 00:00	10 min	250m
30.09.2019 06:50	10 min	Gill data missing
30.09.2019 23:00	10 min	80m
30.09.2019 23:10	10 min	30m
30.09.2019 23:20	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
30.09.2019 23:30	10 min	all LiDAR data missing
30.09.2019 23:40	10 min	160-250m
30.09.2019 23:50	10 min	140-250m
01.10.2019 00:00	10 min	100-250m
01.10.2019 00:10	20 min	40m 60m 100m 160m 180m 200m
01.10.2019 00:30	20 min	all LiDAR data missing
01.10.2019 00:50	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
01.10.2019 01:00	10 min	30m 40m 60m 80m 100m 120m 160m
01.10.2019 01:20	10 min	100-250m
01.10.2019 01:30	10 min	160-250m
01.10.2019 01:50	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
01.10.2019 02:00	10 min	40m 80-250m
01.10.2019 02:10	10 min	40m 80m 100m 120m 140m 160m 200-250m
01.10.2019 02:20	10 min	40m 80-250m
01.10.2019 02:30	10 min	30m 60m 80m 100m 120m 140m 160m 180m 200m
01.10.2019 02:40	40 min	all LiDAR data missing
01.10.2019 10:20	10 min	200m
01.10.2019 16:40	10 min	all LiDAR data missing
01.10.2019 19:20	10 min	Gill data missing
02.10.2019 21:10	10 min	Gill data missing
05.10.2019 03:20	10 min	all LiDAR data missing
06.10.2019 00:30	10 min	Gill data missing
06.10.2019 01:30	10 min	all LiDAR data missing
07.10.2019 13:40	10 min	80m
07.10.2019 23:00	10 min	all LiDAR data missing
08.10.2019 01:10	10 min	140m
08.10.2019 06:10	10 min	Gill data missing
08.10.2019 07:20	10 min	Gill data missing
09.10.2019 03:10	10 min	30m 60-250m
09.10.2019 19:10	10 min	140-250m
11.10.2019 00:10	10 min	80-250m
11.10.2019 00:20	10 min	120-250m
11.10.2019 00:30	20 min	80-250m
11.10.2019 01:20	10 min	80-250m
11.10.2019 01:50	10 min	200m
11.10.2019 02:10	10 min	250m
11.10.2019 02:20	10 min	80-250m
11.10.2019 07:20	10 min	250m
11.10.2019 09:40	10 min	250m
11.10.2019 11:00	10 min	250m
11.10.2019 11:20	10 min	250m
11.10.2019 12:50	10 min	250m
11.10.2019 16:50	10 min	250m
11.10.2019 17:10	30 min	250m
11.10.2019 17:50	20 min	200-250m
11.10.2019 18:10	10 min	180-250m
11.10.2019 18:20	10 min	160-250m
11.10.2019 18:30	10 min	200m
11.10.2019 19:40	10 min	160-250m
11.10.2019 19:50	20 min	80-250m
12.10.2019 04:30	10 min	Gill data missing
12.10.2019 20:20	10 min	Gill data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
12.10.2019 23:30	10 min	200m
12.10.2019 23:40	10 min	160-250m
13.10.2019 00:20	10 min	200-250m
13.10.2019 00:40	10 min	250m
13.10.2019 00:50	10 min	200-250m
13.10.2019 01:00	10 min	250m
13.10.2019 01:10	10 min	140m 160m 180m 200m
13.10.2019 01:20	10 min	200m
13.10.2019 01:30	10 min	180-250m
13.10.2019 01:40	10 min	180m
13.10.2019 01:50	10 min	40m 120m 140m 160m 180m 200m
13.10.2019 02:00	10 min	160-250m
13.10.2019 02:10	10 min	140-250m
13.10.2019 02:20	10 min	180-250m
13.10.2019 02:30	10 min	200m
13.10.2019 02:40	10 min	180m 250m
13.10.2019 02:50	20 min	180-250m
13.10.2019 03:10	20 min	200-250m
13.10.2019 03:50	10 min	180-250m
13.10.2019 04:00	10 min	160-250m
13.10.2019 04:10	10 min	200-250m
13.10.2019 04:20	10 min	250m
13.10.2019 05:10	10 min	250m
13.10.2019 05:20	10 min	180-250m
13.10.2019 05:30	10 min	200-250m
13.10.2019 05:40	10 min	160-250m
13.10.2019 05:50	40 min	200-250m
13.10.2019 06:30	10 min	250m
13.10.2019 08:00	10 min	250m
13.10.2019 09:40	10 min	180-250m
13.10.2019 09:50	10 min	120-250m
13.10.2019 10:00	10 min	40m 120-250m
13.10.2019 10:10	10 min	40m 80-250m
13.10.2019 10:20	1 hours 00 min	120-250m
13.10.2019 11:20	10 min	160-250m
13.10.2019 11:30	10 min	200-250m
13.10.2019 11:40	10 min	180-250m
13.10.2019 11:50	10 min	140-250m
13.10.2019 12:00	10 min	160-250m
13.10.2019 12:10	20 min	250m
13.10.2019 14:20	10 min	200m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
14.10.2019 04:10	10 min	40m
14.10.2019 04:40	10 min	140m 200m
14.10.2019 05:30	10 min	Gill data missing
15.10.2019 01:20	10 min	Gill data missing
15.10.2019 06:10	10 min	120-250m
15.10.2019 07:10	10 min	Gill data missing
15.10.2019 15:10	10 min	Gill data missing
16.10.2019 00:40	10 min	250m
16.10.2019 06:00	10 min	250m
16.10.2019 06:50	10 min	Gill data missing
16.10.2019 07:10	10 min	250m
16.10.2019 07:20	10 min	Gill data missing
16.10.2019 09:40	20 min	250m
16.10.2019 10:20	10 min	250m
16.10.2019 14:20	10 min	200m
16.10.2019 16:50	10 min	120m
16.10.2019 17:20	10 min	200m
16.10.2019 18:00	10 min	250m
16.10.2019 20:30	10 min	180m 200m
17.10.2019 01:00	10 min	Gill data missing
17.10.2019 02:00	10 min	Gill data missing
18.10.2019 01:30	10 min	250m
18.10.2019 03:50	10 min	40m
18.10.2019 05:10	10 min	180m 250m
18.10.2019 05:50	10 min	250m
18.10.2019 06:30	10 min	40m 250m
19.10.2019 17:40	10 min	200m
20.10.2019 03:00	10 min	Gill data missing
21.10.2019 07:00	10 min	Gill data missing
21.10.2019 12:00	10 min	180m
21.10.2019 13:10	10 min	200-250m
21.10.2019 13:40	10 min	120m 140m
21.10.2019 14:20	10 min	180m
21.10.2019 14:40	30 min	160m
21.10.2019 15:40	10 min	140m 180m
21.10.2019 15:50	10 min	80m 120-250m
21.10.2019 16:00	10 min	120-250m
21.10.2019 16:10	20 min	140m 180m 250m
21.10.2019 16:50	10 min	60m 80m 100m 120m 140m 160m 180m 200m
21.10.2019 17:10	10 min	250m
21.10.2019 17:20	10 min	120-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
21.10.2019 17:30	10 min	140-250m
21.10.2019 17:40	10 min	40m 180m
21.10.2019 17:50	10 min	160m 180m 200m
21.10.2019 18:00	10 min	200m
21.10.2019 18:10	10 min	100m 120m 180m
21.10.2019 18:20	10 min	80m 100m 120m 140m 160m 180m
21.10.2019 18:40	20 min	60m 80m 120m 140m 160m 180m
21.10.2019 19:10	10 min	180m 200m
21.10.2019 19:20	10 min	160m
21.10.2019 19:30	10 min	140-250m
21.10.2019 19:50	10 min	180-250m
21.10.2019 20:00	10 min	140m
21.10.2019 20:30	10 min	180m
21.10.2019 21:20	10 min	200m
21.10.2019 22:00	10 min	180m 250m
21.10.2019 22:10	10 min	60m 140m 180m 200m
21.10.2019 22:20	20 min	140m 180m 200m
21.10.2019 22:40	10 min	80-250m
21.10.2019 22:50	10 min	all LiDAR data missing
21.10.2019 23:00	10 min	250m
21.10.2019 23:20	10 min	60-250m
21.10.2019 23:30	10 min	30m 40m 60m
22.10.2019 00:00	20 min	30m 40m 60m
22.10.2019 00:40	10 min	120-250m
22.10.2019 00:50	10 min	80-250m
22.10.2019 01:00	10 min	100-250m
22.10.2019 01:10	10 min	60m 80m 100m 120m 140m 160m 180m 250m
22.10.2019 01:20	10 min	80m 120m 160m 180m 200m
22.10.2019 01:30	10 min	40m 80m
22.10.2019 01:40	10 min	30m 40m 80m 100m 120m 140m 160m 180m 250m
22.10.2019 01:50	10 min	80m 100m 120m 140m 160m 180m 200m
22.10.2019 02:00	10 min	140m 200m
22.10.2019 02:10	10 min	60m
22.10.2019 02:50	10 min	250m
22.10.2019 05:50	10 min	180m
23.10.2019 02:40	10 min	Gill data missing
23.10.2019 18:20	10 min	250m
24.10.2019 03:30	10 min	160-250m
24.10.2019 03:50	10 min	200-250m
24.10.2019 04:00	10 min	160-250m
24.10.2019 04:10	10 min	180-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
24.10.2019 05:30	10 min	250m
24.10.2019 08:40	40 min	250m
24.10.2019 09:20	10 min	160m 200-250m
24.10.2019 09:30	10 min	160-250m
24.10.2019 10:00	10 min	180-250m
24.10.2019 10:40	10 min	250m
24.10.2019 17:00	10 min	Gill data missing
24.10.2019 17:20	10 min	Gill data missing
25.10.2019 01:10	10 min	Gill data missing
25.10.2019 02:40	10 min	Gill data missing
26.10.2019 20:30	10 min	120m
26.10.2019 21:30	10 min	250m
28.10.2019 19:10	10 min	40m 60m 80m 100m 120m 140m 180m 200m
30.10.2019 06:00	10 min	all LiDAR data missing
31.10.2019 04:50	10 min	all LiDAR data missing
31.10.2019 05:00	10 min	Gill data missing
31.10.2019 05:40	10 min	all LiDAR data missing
31.10.2019 08:00	10 min	Gill data missing
31.10.2019 11:00	10 min	Gill data missing
01.11.2019 11:40	10 min	250m
01.11.2019 11:50	10 min	140-250m
01.11.2019 12:10	10 min	140m 180-250m
01.11.2019 12:20	10 min	180m
01.11.2019 12:30	10 min	160-250m
01.11.2019 12:40	10 min	40m 80-250m
01.11.2019 12:50	10 min	80-250m
01.11.2019 13:00	10 min	80m 250m
01.11.2019 13:10	10 min	80-250m
01.11.2019 13:20	20 min	180-250m
01.11.2019 13:40	10 min	140m 160m 200-250m
01.11.2019 14:30	30 min	250m
01.11.2019 15:00	20 min	140m 200-250m
01.11.2019 15:30	30 min	160-250m
01.11.2019 16:00	10 min	140-250m
01.11.2019 16:10	10 min	120m 180-250m
01.11.2019 16:30	30 min	160m
01.11.2019 17:20	10 min	250m
01.11.2019 17:30	20 min	140m 180-250m
01.11.2019 17:50	10 min	120-250m
01.11.2019 18:00	10 min	200-250m
01.11.2019 18:10	20 min	250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
01.11.2019 18:30	10 min	180-250m
01.11.2019 18:40	10 min	200-250m
01.11.2019 19:00	10 min	100m 120m 140m 160m 180m 250m
01.11.2019 19:10	10 min	80m 120m 140m 250m
01.11.2019 19:30	10 min	250m
01.11.2019 19:40	10 min	80m 160m 180m 250m
01.11.2019 19:50	10 min	80m 100m 120m 140m 180-250m
01.11.2019 20:30	10 min	250m
01.11.2019 20:40	10 min	100m 250m
01.11.2019 20:50	10 min	140m 160m 200-250m
01.11.2019 21:00	10 min	200-250m
01.11.2019 21:10	10 min	120-250m
01.11.2019 21:20	10 min	140-250m
01.11.2019 21:30	10 min	80m 120-250m
01.11.2019 21:40	10 min	140-250m
01.11.2019 21:50	10 min	250m
02.11.2019 01:50	10 min	Gill data missing
02.11.2019 03:20	10 min	Gill data missing
02.11.2019 04:00	10 min	250m
02.11.2019 04:10	10 min	60m 120-250m
02.11.2019 04:20	20 min	120m 160-250m
02.11.2019 04:40	40 min	120-250m
02.11.2019 05:30	10 min	180-250m
03.11.2019 00:10	10 min	80-250m
03.11.2019 00:20	10 min	80m 100m 200m
03.11.2019 00:30	10 min	180m
03.11.2019 02:00	20 min	80-250m
03.11.2019 02:30	10 min	80m 100m
03.11.2019 03:00	10 min	Gill data missing
03.11.2019 08:40	10 min	40-250m
03.11.2019 08:50	50 min	80-250m
03.11.2019 09:40	10 min	250m
03.11.2019 11:20	10 min	250m
03.11.2019 11:30	10 min	80m 180-250m
03.11.2019 11:50	10 min	250m
03.11.2019 12:00	10 min	200-250m
03.11.2019 12:10	10 min	250m
03.11.2019 12:20	10 min	80-250m
03.11.2019 12:50	10 min	250m
03.11.2019 13:00	10 min	100m 180m 250m
03.11.2019 13:20	20 min	250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
03.11.2019 14:10	30 min	250m
03.11.2019 14:40	10 min	200-250m
03.11.2019 14:50	10 min	80m 120m 160-250m
03.11.2019 15:00	10 min	250m
03.11.2019 15:20	20 min	80-250m
03.11.2019 15:40	10 min	250m
03.11.2019 16:10	10 min	250m
03.11.2019 16:20	10 min	80-250m
03.11.2019 16:50	10 min	250m
03.11.2019 17:20	10 min	250m
03.11.2019 18:10	10 min	250m
03.11.2019 18:20	10 min	200-250m
03.11.2019 18:40	10 min	200-250m
03.11.2019 19:00	10 min	250m
03.11.2019 19:10	10 min	200-250m
03.11.2019 19:20	10 min	250m
03.11.2019 19:30	20 min	200-250m
03.11.2019 19:50	10 min	80-250m
03.11.2019 20:00	10 min	200-250m
03.11.2019 20:10	20 min	250m
03.11.2019 20:30	10 min	200-250m
03.11.2019 20:40	10 min	250m
03.11.2019 20:50	20 min	200-250m
03.11.2019 21:10	10 min	250m
03.11.2019 22:00	10 min	140-250m
03.11.2019 22:50	10 min	200-250m
03.11.2019 23:00	10 min	250m
03.11.2019 23:10	10 min	200-250m
03.11.2019 23:20	10 min	180-250m
03.11.2019 23:30	10 min	160-250m
04.11.2019 09:10	20 min	80-250m
04.11.2019 09:30	10 min	80m 100m 160-250m
04.11.2019 09:40	10 min	160m 200-250m
04.11.2019 09:50	10 min	200m
04.11.2019 11:30	10 min	200-250m
04.11.2019 12:00	20 min	160-250m
04.11.2019 12:20	10 min	100m 140-250m
04.11.2019 12:30	10 min	180m
04.11.2019 12:50	10 min	80-250m
04.11.2019 13:00	10 min	40m 80-250m
04.11.2019 13:10	10 min	160-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.11.2019 13:20	20 min	40m 80-250m
04.11.2019 13:40	30 min	80-250m
04.11.2019 20:00	10 min	80m 120m 160-250m
04.11.2019 20:30	10 min	100m 160-250m
04.11.2019 20:40	10 min	80-250m
04.11.2019 20:50	10 min	250m
04.11.2019 21:20	10 min	250m
04.11.2019 23:40	10 min	250m
04.11.2019 23:50	10 min	40-250m
05.11.2019 09:20	10 min	250m
05.11.2019 10:10	20 min	180m
05.11.2019 10:40	10 min	120-250m
05.11.2019 10:50	10 min	160m 180m 200m
05.11.2019 11:00	10 min	250m
05.11.2019 11:30	10 min	250m
05.11.2019 11:40	10 min	180-250m
05.11.2019 11:50	10 min	40m 180-250m
05.11.2019 12:10	10 min	200m
05.11.2019 12:40	10 min	160-250m
05.11.2019 14:10	10 min	250m
05.11.2019 14:30	20 min	250m
05.11.2019 15:20	10 min	250m
05.11.2019 15:50	10 min	200-250m
05.11.2019 16:10	10 min	250m
05.11.2019 16:30	10 min	250m
05.11.2019 16:50	10 min	250m
05.11.2019 19:00	10 min	250m
05.11.2019 19:40	10 min	250m
06.11.2019 05:30	10 min	Gill data missing
06.11.2019 15:20	10 min	Gill data missing
06.11.2019 17:40	10 min	all LiDAR data missing
07.11.2019 07:30	10 min	40m 180m
07.11.2019 16:10	10 min	all LiDAR data missing
07.11.2019 22:50	10 min	all LiDAR data missing
08.11.2019 17:40	10 min	40-250m
09.11.2019 09:00	20 min	250m
09.11.2019 12:10	10 min	Gill data missing
09.11.2019 13:00	10 min	120m 140m 160m 180m 250m
09.11.2019 20:20	10 min	all LiDAR data missing
10.11.2019 06:40	10 min	all LiDAR data missing
10.11.2019 12:00	10 min	all LiDAR data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.11.2019 03:30	10 min	all LiDAR data missing
11.11.2019 11:00	10 min	40m
11.11.2019 21:30	10 min	Gill data missing
11.11.2019 22:20	10 min	Gill data missing
12.11.2019 06:10	10 min	Gill data missing
12.11.2019 18:20	10 min	all LiDAR data missing
13.11.2019 00:10	10 min	180-250m
13.11.2019 00:30	10 min	160m 250m
13.11.2019 00:40	10 min	40m 80-250m
13.11.2019 00:50	10 min	80-250m
13.11.2019 01:00	10 min	200m
13.11.2019 01:10	10 min	80m 120-250m
13.11.2019 01:20	10 min	80-250m
13.11.2019 01:40	10 min	200-250m
13.11.2019 01:50	20 min	80-250m
13.11.2019 02:10	10 min	250m
13.11.2019 02:20	10 min	120-250m
13.11.2019 02:30	10 min	80m 160m 180m 200m
13.11.2019 02:40	10 min	200-250m
13.11.2019 02:50	10 min	80m 120-250m
13.11.2019 03:00	10 min	180-250m
13.11.2019 03:10	20 min	140-250m
13.11.2019 03:30	20 min	80-250m
13.11.2019 03:50	10 min	200-250m
13.11.2019 23:20	10 min	40m 80-250m
13.11.2019 23:30	10 min	80-250m
14.11.2019 02:30	10 min	250m
14.11.2019 07:30	10 min	Gill data missing
14.11.2019 08:40	10 min	250m
14.11.2019 22:20	10 min	140-250m
15.11.2019 15:50	10 min	40m 120m
15.11.2019 20:30	10 min	100m 120m 140m 180m
16.11.2019 15:40	10 min	Gill data missing
17.11.2019 00:10	10 min	250m
17.11.2019 00:20	10 min	80-250m
17.11.2019 00:30	10 min	80m 100m 120m 160m 180m 250m
17.11.2019 00:40	10 min	80-250m
17.11.2019 04:00	20 min	80-250m
17.11.2019 04:30	20 min	80-250m
17.11.2019 04:50	10 min	160m
17.11.2019 05:00	10 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.11.2019 08:50	10 min	80-250m
17.11.2019 09:00	10 min	80m 120m
17.11.2019 09:40	10 min	80-250m
17.11.2019 21:20	10 min	Gill data missing
19.11.2019 09:40	10 min	all LiDAR data missing
20.11.2019 03:20	10 min	all LiDAR data missing
20.11.2019 07:10	10 min	Gill data missing
20.11.2019 08:00	10 min	all LiDAR data missing
20.11.2019 20:00	10 min	200-250m
20.11.2019 20:10	10 min	250m
20.11.2019 20:50	20 min	250m
20.11.2019 21:20	30 min	250m
20.11.2019 22:00	30 min	250m
20.11.2019 23:10	20 min	250m
20.11.2019 23:40	10 min	250m
21.11.2019 00:20	20 min	250m
21.11.2019 00:40	10 min	200-250m
21.11.2019 01:10	10 min	250m
21.11.2019 01:20	10 min	180m 250m
21.11.2019 07:10	20 min	200-250m
21.11.2019 07:30	10 min	250m
21.11.2019 08:10	10 min	Gill data missing
21.11.2019 15:20	10 min	40m 160m
21.11.2019 18:40	10 min	160m 180m
21.11.2019 19:40	10 min	200m
21.11.2019 21:40	10 min	250m
21.11.2019 21:50	10 min	40m 140m 180m 200m
21.11.2019 22:30	10 min	all LiDAR data missing
22.11.2019 03:00	10 min	all LiDAR data missing
22.11.2019 05:30	10 min	200m
22.11.2019 06:00	10 min	180m 250m
22.11.2019 11:20	10 min	Gill data missing
22.11.2019 16:00	10 min	Gill data missing
23.11.2019 00:30	10 min	40m 100m 180m
23.11.2019 00:50	10 min	250m
23.11.2019 01:00	10 min	160-250m
23.11.2019 01:10	10 min	40m 120m
23.11.2019 01:20	10 min	Gill data missing
23.11.2019 04:00	10 min	120m 250m
23.11.2019 05:40	10 min	Gill data missing
23.11.2019 06:00	10 min	40m 60m 200-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
23.11.2019 10:40	10 min	all LiDAR data missing
23.11.2019 19:20	10 min	40m 80m 250m
23.11.2019 20:50	10 min	200m
23.11.2019 21:40	10 min	40m
23.11.2019 21:50	10 min	all LiDAR data missing
24.11.2019 05:10	10 min	40m
24.11.2019 08:00	10 min	Gill data missing
24.11.2019 09:30	10 min	40m
24.11.2019 10:50	10 min	40m
24.11.2019 11:50	20 min	250m
24.11.2019 14:50	10 min	40m 60m 80m 140m 180-250m
24.11.2019 20:20	10 min	40m 80m
25.11.2019 00:10	10 min	180m 250m
25.11.2019 00:20	20 min	80-250m
25.11.2019 01:00	10 min	80m 100m 120m 140m 180-250m
25.11.2019 01:10	30 min	80-250m
25.11.2019 01:40	10 min	140m 160m 200m
25.11.2019 01:50	10 min	80-250m
25.11.2019 02:10	10 min	80-250m
25.11.2019 02:20	10 min	100m 120m 140m 180-250m
25.11.2019 02:40	10 min	80-250m
25.11.2019 03:00	20 min	80-250m
25.11.2019 03:30	10 min	160m 180m 250m
25.11.2019 03:40	10 min	140-250m
25.11.2019 04:10	20 min	200-250m
25.11.2019 05:00	10 min	250m
25.11.2019 05:10	10 min	160-250m
25.11.2019 05:20	20 min	140-250m
25.11.2019 11:20	10 min	all LiDAR data missing
25.11.2019 12:00	10 min	180m
25.11.2019 12:40	10 min	200m
25.11.2019 13:10	10 min	180-250m
25.11.2019 13:20	10 min	200-250m
25.11.2019 14:20	10 min	200m
25.11.2019 14:30	10 min	160m 180m
25.11.2019 14:50	10 min	160m 180m 250m
25.11.2019 15:10	10 min	Gill data missing
25.11.2019 15:50	10 min	180m
25.11.2019 16:30	10 min	Gill data missing
25.11.2019 19:10	10 min	120-250m
25.11.2019 19:20	10 min	100-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
25.11.2019 19:30	10 min	120-250m
25.11.2019 19:40	10 min	100-250m
25.11.2019 19:50	10 min	100m 120m 140m 180-250m
25.11.2019 20:00	10 min	100-250m
25.11.2019 20:10	20 min	140m 250m
25.11.2019 20:30	10 min	140-250m
26.11.2019 02:20	10 min	all LiDAR data missing
26.11.2019 06:50	20 min	250m
26.11.2019 07:20	40 min	250m
26.11.2019 08:40	20 min	250m
26.11.2019 09:00	10 min	40m 180-250m
26.11.2019 09:10	10 min	140-250m
26.11.2019 09:20	10 min	120-250m
26.11.2019 09:30	10 min	40m 80-250m
26.11.2019 09:40	10 min	40m 60m 120-250m
26.11.2019 09:50	20 min	120-250m
26.11.2019 10:10	10 min	140-250m
26.11.2019 10:20	30 min	120-250m
26.11.2019 10:50	20 min	140-250m
26.11.2019 11:10	40 min	120-250m
26.11.2019 11:50	10 min	140-250m
26.11.2019 12:00	30 min	160-250m
26.11.2019 12:30	30 min	120-250m
26.11.2019 13:00	10 min	60m 80m 120-250m
26.11.2019 13:10	10 min	120-250m
26.11.2019 13:20	10 min	40-250m
26.11.2019 18:40	10 min	Gill data missing
26.11.2019 19:30	20 min	250m
26.11.2019 20:20	10 min	250m
26.11.2019 20:30	10 min	200-250m
26.11.2019 20:40	10 min	250m
26.11.2019 21:20	10 min	180-250m
26.11.2019 21:30	10 min	200-250m
26.11.2019 21:40	10 min	250m
26.11.2019 21:50	10 min	200-250m
26.11.2019 22:00	30 min	250m
26.11.2019 22:30	20 min	160-250m
26.11.2019 22:50	20 min	200-250m
26.11.2019 23:10	10 min	250m
27.11.2019 03:30	10 min	140m
27.11.2019 03:40	10 min	120-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
27.11.2019 04:40	10 min	180m
27.11.2019 04:50	10 min	30m 40m 60m 100-250m
27.11.2019 15:10	10 min	Gill data missing
28.11.2019 03:10	10 min	140-250m
28.11.2019 03:20	10 min	250m
28.11.2019 04:20	10 min	200-250m
28.11.2019 05:20	10 min	140m 160m 180m
28.11.2019 05:30	10 min	120-250m
28.11.2019 09:20	10 min	Gill data missing
28.11.2019 11:50	10 min	30m 40m 60m 120m 140m 160m 180m 250m
29.11.2019 20:00	10 min	Gill data missing
29.11.2019 21:10	10 min	all LiDAR data missing
30.11.2019 02:50	10 min	all LiDAR data missing
30.11.2019 05:00	10 min	Gill data missing
30.11.2019 13:10	10 min	Gill data missing
30.11.2019 14:00	10 min	Gill data missing
30.11.2019 14:30	10 min	all LiDAR data missing
30.11.2019 20:50	10 min	all LiDAR data missing
30.11.2019 21:50	10 min	30m 40m 60m 80m 100m 120m 200m
30.11.2019 22:10	10 min	30m 40m 60m 80m 100m 120m
01.12.2019 06:00	10 min	all LiDAR data missing
01.12.2019 11:10	10 min	40m 250m
01.12.2019 23:00	10 min	all LiDAR data missing
02.12.2019 04:10	10 min	Gill data missing
02.12.2019 13:10	10 min	Gill data missing
02.12.2019 17:10	10 min	Gill data missing
02.12.2019 18:20	10 min	200-250m
02.12.2019 23:50	10 min	40m 80m
03.12.2019 04:00	10 min	Gill data missing
03.12.2019 04:30	10 min	Gill data missing
03.12.2019 08:50	10 min	30m 40m 60m 80m 100m 140m 160m 200-250m
03.12.2019 13:10	20 min	60m
03.12.2019 13:30	10 min	40m 60m
03.12.2019 14:40	10 min	40m
03.12.2019 18:40	10 min	40m 200-250m
03.12.2019 19:20	10 min	250m
03.12.2019 19:50	10 min	40m
03.12.2019 20:30	10 min	40m
03.12.2019 21:00	10 min	all LiDAR data missing
04.12.2019 03:30	10 min	250m
04.12.2019 11:30	10 min	Gill data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.12.2019 13:00	10 min	all LiDAR data missing
04.12.2019 19:00	10 min	100m
04.12.2019 20:40	10 min	Gill data missing
05.12.2019 01:40	10 min	Gill data missing
05.12.2019 03:20	10 min	Gill data missing
05.12.2019 06:20	10 min	all LiDAR data missing
05.12.2019 09:50	10 min	80m 200m
05.12.2019 13:10	10 min	Gill data missing
06.12.2019 03:50	10 min	40-250m
06.12.2019 09:00	10 min	250m
06.12.2019 09:10	10 min	200-250m
06.12.2019 09:20	10 min	160-250m
06.12.2019 09:30	30 min	120-250m
06.12.2019 10:00	10 min	140-250m
06.12.2019 10:10	50 min	120-250m
06.12.2019 11:00	30 min	140-250m
06.12.2019 11:30	10 min	160-250m
06.12.2019 11:40	10 min	120-250m
06.12.2019 11:50	10 min	140m 180-250m
06.12.2019 12:00	10 min	180-250m
06.12.2019 13:20	10 min	200-250m
06.12.2019 13:30	10 min	140-250m
06.12.2019 13:40	50 min	120-250m
06.12.2019 14:30	10 min	140-250m
06.12.2019 14:40	10 min	200-250m
06.12.2019 14:50	10 min	250m
06.12.2019 17:00	10 min	Gill data missing
06.12.2019 19:50	10 min	all LiDAR data missing
07.12.2019 01:40	10 min	40m
07.12.2019 05:40	10 min	40m 80m 100m
08.12.2019 00:20	10 min	80m 160-250m
08.12.2019 00:30	10 min	60-250m
08.12.2019 04:20	10 min	Gill data missing
08.12.2019 07:30	20 min	140m
08.12.2019 07:50	10 min	120m 140m
08.12.2019 08:20	10 min	140m
10.12.2019 00:00	10 min	40m 60m 80m 100m 120m 140m 180m
10.12.2019 18:10	10 min	60m
11.12.2019 00:50	10 min	40m
11.12.2019 01:50	10 min	Gill data missing
11.12.2019 14:00	10 min	Gill data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.12.2019 16:00	10 min	Gill data missing
12.12.2019 00:00	10 min	250m
12.12.2019 11:10	10 min	Gill data missing
12.12.2019 11:30	10 min	Gill data missing
12.12.2019 21:50	10 min	all LiDAR data missing
13.12.2019 02:30	10 min	all LiDAR data missing
13.12.2019 02:40	50 min	80-250m
13.12.2019 03:30	10 min	80m 200m
13.12.2019 03:40	20 min	80-250m
13.12.2019 04:10	1 hours 30 min	80-250m
13.12.2019 05:40	10 min	40m 80-250m
13.12.2019 05:50	30 min	80-250m
13.12.2019 06:20	10 min	40m 80-250m
13.12.2019 06:30	1 hours 00 min	80-250m
13.12.2019 07:40	10 min	80-250m
13.12.2019 07:50	10 min	100m 250m
13.12.2019 08:00	1 hours 00 min	80-250m
13.12.2019 09:00	20 min	200m
13.12.2019 09:20	20 min	80-250m
13.12.2019 09:40	10 min	80m 120m 180m
13.12.2019 11:10	10 min	100m 250m
13.12.2019 11:20	10 min	80-250m
13.12.2019 11:40	20 min	80-250m
13.12.2019 12:40	10 min	80-250m
13.12.2019 12:50	10 min	100m
13.12.2019 13:30	50 min	80-250m
13.12.2019 14:20	10 min	all LiDAR data missing
13.12.2019 17:20	20 min	80-250m
13.12.2019 17:50	20 min	180m
13.12.2019 18:40	10 min	100m 120m 140m 160m 180m 200m
13.12.2019 18:50	10 min	160-250m
13.12.2019 19:00	30 min	80-250m
14.12.2019 00:10	10 min	Gill data missing
14.12.2019 03:30	10 min	all LiDAR data missing
15.12.2019 05:20	10 min	30m 60m 80m 140m 180-250m
16.12.2019 08:30	10 min	all LiDAR data missing
16.12.2019 14:00	10 min	Gill data missing
16.12.2019 17:30	10 min	Gill data missing
16.12.2019 18:20	10 min	80m 120-250m
16.12.2019 18:30	10 min	80-250m
16.12.2019 18:40	10 min	40-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.12.2019 21:20	10 min	200-250m
16.12.2019 21:30	10 min	140-250m
16.12.2019 21:40	10 min	80m 100m 160-250m
16.12.2019 23:40	10 min	Gill data missing
17.12.2019 00:40	10 min	250m
17.12.2019 00:50	10 min	200-250m
17.12.2019 01:00	10 min	250m
17.12.2019 01:30	10 min	160m
17.12.2019 01:50	10 min	200-250m
17.12.2019 02:00	10 min	160m 180m 250m
17.12.2019 02:20	10 min	180m
17.12.2019 02:30	10 min	160-250m
17.12.2019 02:50	10 min	160-250m
17.12.2019 03:00	20 min	140-250m
17.12.2019 03:30	10 min	200-250m
17.12.2019 03:40	20 min	200m
17.12.2019 08:00	10 min	200-250m
17.12.2019 08:10	10 min	180-250m
17.12.2019 08:20	10 min	140-250m
17.12.2019 08:30	10 min	160-250m
17.12.2019 08:40	20 min	250m
17.12.2019 14:20	10 min	120-250m
17.12.2019 14:30	10 min	160-250m
17.12.2019 14:40	10 min	250m
17.12.2019 18:30	10 min	40m 60m 120-250m
17.12.2019 19:30	20 min	140-250m
17.12.2019 19:50	10 min	250m
17.12.2019 21:10	10 min	250m
17.12.2019 22:30	10 min	250m
17.12.2019 22:40	10 min	200-250m
18.12.2019 03:20	10 min	Gill data missing
18.12.2019 14:00	10 min	100m 120m 160-250m
18.12.2019 15:10	10 min	250m
18.12.2019 15:20	20 min	200-250m
18.12.2019 15:40	10 min	250m
18.12.2019 15:50	30 min	80-250m
18.12.2019 16:20	10 min	40m 80-250m
18.12.2019 16:40	10 min	80m 100m 140-250m
18.12.2019 16:50	1 hours 00 min	80-250m
18.12.2019 17:50	10 min	80m 120m 160-250m
18.12.2019 19:00	10 min	all LiDAR data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
19.12.2019 08:00	10 min	Gill data missing
19.12.2019 08:30	10 min	Gill data missing
19.12.2019 21:50	10 min	Gill data missing
20.12.2019 02:40	10 min	Gill data missing
20.12.2019 03:00	10 min	30m 40m 80m
20.12.2019 20:10	10 min	all LiDAR data missing
20.12.2019 22:10	10 min	all LiDAR data missing
21.12.2019 06:20	10 min	40m 250m
21.12.2019 08:00	10 min	all LiDAR data missing
21.12.2019 09:40	10 min	all LiDAR data missing
21.12.2019 10:00	10 min	40m
21.12.2019 10:20	10 min	180m
21.12.2019 17:30	10 min	all LiDAR data missing
21.12.2019 18:00	10 min	Gill data missing
21.12.2019 20:10	10 min	250m
21.12.2019 21:40	10 min	Gill data missing
22.12.2019 07:40	10 min	40-250m
22.12.2019 08:10	10 min	80m 100m 120m 140m 180-250m
22.12.2019 08:20	20 min	80-250m
22.12.2019 08:50	10 min	100-250m
22.12.2019 09:10	1 hours 10 min	80-250m
22.12.2019 10:30	1 hours 00 min	80-250m
22.12.2019 11:30	30 min	40m 80-250m
22.12.2019 12:00	1 hours 00 min	80-250m
22.12.2019 13:00	10 min	60-250m
22.12.2019 13:10	10 min	80-250m
22.12.2019 13:20	10 min	100m 140m 180-250m
22.12.2019 13:30	20 min	80-250m
22.12.2019 13:50	10 min	120m 140m 180-250m
22.12.2019 14:00	30 min	80-250m
22.12.2019 14:30	10 min	80m 250m
22.12.2019 14:40	10 min	80-250m
22.12.2019 14:50	10 min	120m 160m
22.12.2019 15:00	10 min	80-250m
22.12.2019 15:10	10 min	140m
22.12.2019 15:20	10 min	120m 140m 160m 250m
22.12.2019 15:30	10 min	140m 160m 200m
22.12.2019 15:40	10 min	160-250m
22.12.2019 19:00	10 min	160-250m
22.12.2019 19:10	10 min	180m 250m
22.12.2019 19:20	30 min	80-250m

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
22.12.2019 19:50	10 min	140-250m
22.12.2019 20:00	10 min	80-250m
22.12.2019 20:10	10 min	250m
22.12.2019 20:20	10 min	200-250m
22.12.2019 20:30	10 min	80-250m
23.12.2019 22:20	10 min	Gill data missing
24.12.2019 03:50	10 min	Gill data missing
25.12.2019 00:30	10 min	Gill data missing
25.12.2019 13:10	10 min	Gill data missing
25.12.2019 16:30	10 min	Gill data missing
26.12.2019 12:30	10 min	Gill data missing
26.12.2019 18:20	10 min	Gill data missing
27.12.2019 10:50	10 min	Gill data missing
28.12.2019 05:50	10 min	Gill data missing
29.12.2019 10:40	10 min	Gill data missing
29.12.2019 14:40	10 min	Gill data missing
30.12.2019 04:40	10 min	Gill data missing
30.12.2019 14:20	10 min	Gill data missing
30.12.2019 20:30	10 min	Gill data missing
30.12.2019 21:00	10 min	Gill data missing
31.12.2019 13:20	10 min	Gill data missing
02.01.2020 03:00	10 min	Gill data missing
03.01.2020 04:30	10 min	Gill data missing
04.01.2020 14:20	10 min	Gill data missing
05.01.2020 06:10	10 min	Gill data missing
05.01.2020 12:10	10 min	Gill data missing
06.01.2020 00:50	10 min	Gill data missing
06.01.2020 06:10	10 min	Gill data missing
06.01.2020 23:20	10 min	Gill data missing
07.01.2020 00:40	10 min	Gill data missing
07.01.2020 11:30	10 min	Gill data missing
07.01.2020 21:40	10 min	Gill data missing
08.01.2020 02:00	10 min	Gill data missing
08.01.2020 03:20	10 min	Gill data missing
08.01.2020 05:30	10 min	Gill data missing
08.01.2020 18:40	10 min	Gill data missing
09.01.2020 08:10	10 min	Gill data missing
09.01.2020 13:40	10 min	Gill data missing
09.01.2020 19:20	10 min	Gill data missing
09.01.2020 19:50	10 min	Gill data missing
10.01.2020 06:00	10 min	Gill data missing

Table E.2: Gaps in the wind dataset of Deployment 2 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.01.2020 00:10	10 min	Gill data missing
12.01.2020 05:20	10 min	Gill data missing
12.01.2020 08:40	10 min	Gill data missing
13.01.2020 00:10	10 min	Gill data missing
13.01.2020 03:40	10 min	Gill data missing
13.01.2020 07:50	10 min	Gill data missing
15.01.2020 10:40	10 min	Gill data missing
15.01.2020 16:40	10 min	Gill data missing
16.01.2020 02:20	10 min	Gill data missing
16.01.2020 14:30	10 min	Gill data missing
19.01.2020 09:40	10 min	Gill data missing
19.01.2020 17:30	10 min	Gill data missing
20.01.2020 12:40	10 min	Gill data missing
20.01.2020 17:30	10 min	Gill data missing
20.01.2020 20:00	10 min	Gill data missing
20.01.2020 22:50	10 min	Gill data missing

E.3 Deployment 3

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
22.01.2020 09:40	10 min	80-250m
22.01.2020 10:50	10 min	200m
22.01.2020 11:20	10 min	80-250m
22.01.2020 11:50	40 min	80-250m
22.01.2020 13:10	50 min	80-250m
22.01.2020 14:10	10 min	100m 120m 140m 160m 200m
22.01.2020 14:50	10 min	80-250m
22.01.2020 18:10	10 min	250m
22.01.2020 18:50	20 min	80-250m
22.01.2020 19:10	20 min	60-250m
22.01.2020 19:30	10 min	100-250m
22.01.2020 19:40	10 min	80-250m
22.01.2020 19:50	10 min	60-250m
22.01.2020 20:00	20 min	80-250m
22.01.2020 20:20	10 min	100-250m
22.01.2020 20:30	30 min	80-250m
22.01.2020 21:00	20 min	60-250m
22.01.2020 21:20	40 min	80-250m
22.01.2020 22:00	50 min	60-250m
22.01.2020 22:50	30 min	80-250m
22.01.2020 23:20	20 min	60-250m
22.01.2020 23:40	10 min	160-250m
23.01.2020 00:10	10 min	180m 250m
23.01.2020 00:50	3 hours 00 min	80-250m
23.01.2020 03:50	10 min	30m 80-250m
23.01.2020 04:00	10 min	80-250m
23.01.2020 04:30	10 min	80m 160-250m
23.01.2020 06:20	10 min	250m
23.01.2020 06:50	10 min	80-250m
23.01.2020 07:20	20 min	80-250m
23.01.2020 08:10	40 min	80-250m
23.01.2020 09:20	1 hours 30 min	80-250m
23.01.2020 11:10	10 min	80-250m
23.01.2020 11:50	1 hours 50 min	80-250m
23.01.2020 14:30	10 min	80-250m
23.01.2020 14:40	10 min	160m
23.01.2020 14:50	10 min	80-250m
23.01.2020 15:10	1 hours 20 min	80-250m
23.01.2020 16:30	10 min	100m

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
23.01.2020 16:50	10 min	80-250m
23.01.2020 17:30	1 hours 00 min	80-250m
23.01.2020 18:40	10 min	100m 140m
23.01.2020 19:10	10 min	80-250m
23.01.2020 19:30	10 min	140m 160m 180m 200m
23.01.2020 19:40	10 min	100m 140m 160m 180m 200m
23.01.2020 19:50	20 min	80-250m
23.01.2020 20:30	10 min	80-250m
23.01.2020 20:40	10 min	100m 120m 180m 200m
23.01.2020 20:50	30 min	80-250m
23.01.2020 21:40	10 min	250m
23.01.2020 22:20	10 min	160-250m
23.01.2020 23:10	50 min	80-250m
24.01.2020 00:00	10 min	140m
24.01.2020 00:20	10 min	80-250m
24.01.2020 01:20	10 min	100m 140m 180-250m
24.01.2020 01:30	10 min	120m
24.01.2020 02:10	10 min	100-250m
24.01.2020 02:20	10 min	80-250m
24.01.2020 03:40	10 min	80-250m
24.01.2020 04:20	40 min	80-250m
24.01.2020 05:30	10 min	80-250m
24.01.2020 05:40	10 min	80m 120m 160m
24.01.2020 05:50	10 min	80-250m
24.01.2020 06:40	10 min	180-250m
24.01.2020 06:50	10 min	80-250m
24.01.2020 07:00	10 min	140m
24.01.2020 07:30	10 min	140m 160m 180m 200m
24.01.2020 07:40	20 min	80-250m
24.01.2020 08:00	10 min	80m
24.01.2020 08:20	2 hours 40 min	80-250m
24.01.2020 11:00	10 min	100-250m
24.01.2020 11:10	20 min	80-250m
24.01.2020 11:30	10 min	160m 180m 200m
24.01.2020 11:40	20 min	80-250m
24.01.2020 14:00	10 min	80-250m
24.01.2020 14:20	10 min	80m 200-250m
24.01.2020 14:30	10 min	80m 180m
24.01.2020 14:50	20 min	80-250m
24.01.2020 16:40	10 min	80m 100m 120m 160-250m
24.01.2020 18:30	20 min	80-250m

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
24.01.2020 19:00	10 min	80m
24.01.2020 20:10	10 min	120m
24.01.2020 20:20	10 min	80-250m
24.01.2020 20:30	10 min	180m
24.01.2020 20:50	10 min	80-250m
24.01.2020 21:00	10 min	80m 200-250m
24.01.2020 21:30	1 hours 10 min	80-250m
24.01.2020 22:40	10 min	100m 140m 180m
24.01.2020 22:50	10 min	100m 180m
24.01.2020 23:10	10 min	80-250m
24.01.2020 23:40	10 min	80-250m
24.01.2020 23:50	10 min	100m 120m 160m 180m 200m
25.01.2020 01:40	10 min	100m
25.01.2020 02:00	20 min	80-250m
25.01.2020 02:30	10 min	80-250m
25.01.2020 02:50	10 min	80-250m
25.01.2020 05:10	10 min	80-250m
25.01.2020 06:20	10 min	80-250m
25.01.2020 06:30	10 min	80m 180m 200m
25.01.2020 06:50	10 min	80-250m
25.01.2020 07:50	10 min	80m 120m 160m 200-250m
25.01.2020 08:00	10 min	80m 100m 120m 160-250m
25.01.2020 08:10	10 min	80-250m
25.01.2020 08:30	10 min	180m 250m
25.01.2020 08:40	20 min	80-250m
25.01.2020 09:40	40 min	80-250m
25.01.2020 10:30	10 min	100m 140m 160m 200m
25.01.2020 10:40	20 min	80-250m
25.01.2020 11:40	20 min	80-250m
26.01.2020 03:10	10 min	100m
26.01.2020 04:40	10 min	250m
26.01.2020 04:50	5 hours 40 min	80-250m
26.01.2020 11:00	10 min	80m 100m 120m 160-250m
26.01.2020 11:10	10 min	100m 140-250m
26.01.2020 11:20	10 min	80-250m
26.01.2020 11:30	10 min	250m
26.01.2020 11:40	10 min	80m 160m 200m
26.01.2020 11:50	10 min	80-250m
26.01.2020 12:10	10 min	100m 120m
27.01.2020 18:10	10 min	80-250m
27.01.2020 19:00	30 min	80m 250m

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
27.01.2020 20:30	10 min	80-250m
28.01.2020 10:50	10 min	80-250m
30.01.2020 19:10	20 min	250m
02.02.2020 14:20	10 min	40m 80m 100m 120m 140m 160m 180m 200m
02.02.2020 14:40	10 min	40m 60m
02.02.2020 15:00	10 min	200-250m
02.02.2020 21:10	10 min	180m 250m
04.02.2020 20:00	10 min	80m
05.02.2020 22:20	10 min	Gill data missing
05.02.2020 23:20	10 min	160m
08.02.2020 05:20	10 min	180m
09.02.2020 10:00	10 min	250m
09.02.2020 10:30	10 min	250m
09.02.2020 10:50	10 min	250m
09.02.2020 11:10	10 min	250m
09.02.2020 12:20	10 min	250m
09.02.2020 12:40	20 min	250m
09.02.2020 17:00	10 min	180m
09.02.2020 18:00	10 min	250m
13.02.2020 14:50	20 min	180m
13.02.2020 22:20	3 hours 00 min	all LiDAR data missing
14.02.2020 14:30	10 min	200m
14.02.2020 15:10	10 min	200-250m
14.02.2020 15:20	10 min	200m
14.02.2020 17:30	10 min	30m 40m 60m 80m 100m 120m 180m
14.02.2020 17:40	4 hours 10 min	all LiDAR data missing
14.02.2020 21:50	10 min	40m 60m 80m
15.02.2020 07:50	2 hours 50 min	all LiDAR data missing
15.02.2020 10:40	10 min	250m
15.02.2020 17:40	10 min	250m
15.02.2020 20:40	20 min	250m
15.02.2020 21:40	10 min	250m
15.02.2020 22:20	10 min	250m
15.02.2020 22:30	4 hours 00 min	all LiDAR data missing
16.02.2020 04:00	10 min	200m
16.02.2020 04:20	10 min	200m
16.02.2020 04:50	20 min	200m
16.02.2020 06:30	10 min	180m 250m
16.02.2020 06:40	1 hours 00 min	180m
16.02.2020 11:40	10 min	250m
16.02.2020 13:00	3 hours 30 min	all LiDAR data missing

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.02.2020 02:20	3 hours 40 min	all LiDAR data missing
17.02.2020 06:00	10 min	30m 80m 180m
18.02.2020 00:50	3 hours 40 min	all LiDAR data missing
18.02.2020 04:30	10 min	40m 200-250m
18.02.2020 21:30	3 hours 30 min	all LiDAR data missing
19.02.2020 08:00	10 min	Gill data missing
19.02.2020 13:50	2 hours 00 min	all LiDAR data missing
19.02.2020 15:50	10 min	30m 40m 180m
19.02.2020 21:40	10 min	60m
19.02.2020 21:50	3 hours 50 min	all LiDAR data missing
20.02.2020 14:20	3 hours 20 min	all LiDAR data missing
21.02.2020 03:00	3 hours 30 min	all LiDAR data missing
21.02.2020 17:10	3 hours 00 min	all LiDAR data missing
22.02.2020 03:30	3 hours 30 min	all LiDAR data missing
22.02.2020 20:30	10 min	80m 100m 140m
22.02.2020 20:40	3 hours 10 min	all LiDAR data missing
23.02.2020 07:10	2 hours 40 min	all LiDAR data missing
23.02.2020 18:30	3 hours 10 min	all LiDAR data missing
23.02.2020 21:40	10 min	120m
24.02.2020 07:20	10 min	40m 120m
24.02.2020 07:30	2 hours 40 min	all LiDAR data missing
24.02.2020 13:10	10 min	80m 100m 120m 140m 180-250m
24.02.2020 13:20	10 min	80-250m
24.02.2020 13:50	20 min	100m 180-250m
24.02.2020 14:30	10 min	140m 160m
24.02.2020 16:40	3 hours 30 min	all LiDAR data missing
25.02.2020 04:20	2 hours 40 min	all LiDAR data missing
25.02.2020 18:30	2 hours 40 min	all LiDAR data missing
25.02.2020 21:10	10 min	30m 40m 60m 80m 100m 120m 140m 180m 200m
26.02.2020 04:50	2 hours 40 min	all LiDAR data missing
26.02.2020 20:40	2 hours 50 min	all LiDAR data missing
27.02.2020 07:40	1 hours 50 min	all LiDAR data missing
27.02.2020 17:30	3 hours 00 min	all LiDAR data missing
27.02.2020 20:30	10 min	40m
28.02.2020 03:10	2 hours 00 min	all LiDAR data missing
28.02.2020 05:10	10 min	30m 40m 60m 80m 100m 140-250m
28.02.2020 16:50	2 hours 50 min	all LiDAR data missing
28.02.2020 19:40	10 min	30m 60m 80m 100m 120m 160m 180m
28.02.2020 20:10	10 min	180m
28.02.2020 20:30	10 min	160m
28.02.2020 20:40	10 min	200-250m

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
28.02.2020 20:50	10 min	120-250m
29.02.2020 01:20	3 hours 00 min	all LiDAR data missing
29.02.2020 13:10	2 hours 30 min	all LiDAR data missing
29.02.2020 20:20	3 hours 00 min	all LiDAR data missing
01.03.2020 06:00	1 hours 50 min	all LiDAR data missing
01.03.2020 16:50	2 hours 40 min	all LiDAR data missing
02.03.2020 01:50	2 hours 30 min	all LiDAR data missing
02.03.2020 08:50	10 min	80-250m
02.03.2020 10:10	10 min	250m
02.03.2020 12:40	1 hours 40 min	all LiDAR data missing
02.03.2020 18:30	10 min	120m 140m 160m 180m 200m
02.03.2020 18:40	2 hours 00 min	all LiDAR data missing
03.03.2020 02:00	10 min	60m
03.03.2020 02:10	2 hours 30 min	all LiDAR data missing
03.03.2020 04:40	10 min	30m 60m
03.03.2020 20:00	2 hours 10 min	all LiDAR data missing
04.03.2020 03:10	2 hours 20 min	all LiDAR data missing
04.03.2020 08:20	10 min	Gill data missing
04.03.2020 13:00	10 min	80m 100m
04.03.2020 19:40	1 hours 50 min	all LiDAR data missing
05.03.2020 02:40	2 hours 10 min	all LiDAR data missing
05.03.2020 17:40	2 hours 20 min	all LiDAR data missing
05.03.2020 20:00	10 min	40m 140m
05.03.2020 22:10	10 min	80m 120m 140m 200-250m
05.03.2020 22:20	10 min	200m
06.03.2020 00:30	10 min	80m
06.03.2020 01:00	10 min	60m 80m
06.03.2020 01:10	2 hours 10 min	all LiDAR data missing
06.03.2020 05:40	10 min	120m 200-250m
06.03.2020 06:00	10 min	80m
06.03.2020 06:30	10 min	80-250m
06.03.2020 07:10	10 min	80m 100m 140m 200-250m
06.03.2020 07:40	10 min	80m 100m 120m 160m 200-250m
06.03.2020 07:50	1 hours 10 min	all LiDAR data missing
06.03.2020 10:20	10 min	160m
06.03.2020 14:30	10 min	80m
06.03.2020 15:50	2 hours 10 min	all LiDAR data missing
06.03.2020 22:50	2 hours 00 min	all LiDAR data missing
07.03.2020 05:10	10 min	30m 40m 60m 120m 140m 200m
07.03.2020 05:20	1 hours 30 min	all LiDAR data missing
07.03.2020 16:50	3 hours 30 min	all LiDAR data missing

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
07.03.2020 20:20	10 min	80m 100m 140m 180m 200m
07.03.2020 20:50	10 min	140m 250m
08.03.2020 02:00	2 hours 50 min	all LiDAR data missing
08.03.2020 09:40	1 hours 30 min	all LiDAR data missing
08.03.2020 15:30	10 min	80-250m
08.03.2020 15:40	10 min	180m
08.03.2020 16:00	10 min	80-250m
08.03.2020 16:10	10 min	100-250m
08.03.2020 16:30	10 min	80-250m
08.03.2020 16:40	10 min	250m
08.03.2020 17:00	10 min	80m 100m 180-250m
08.03.2020 17:10	10 min	80-250m
08.03.2020 17:20	10 min	30m 80-250m
08.03.2020 17:30	3 hours 10 min	all LiDAR data missing
08.03.2020 22:20	10 min	180m
08.03.2020 22:40	10 min	80m 120m
08.03.2020 22:50	10 min	80-250m
08.03.2020 23:10	10 min	80m
09.03.2020 02:00	2 hours 50 min	all LiDAR data missing
09.03.2020 04:50	10 min	80m 120m 160m 200m
09.03.2020 12:20	10 min	80m 100m 120m 180m
09.03.2020 12:30	10 min	80-250m
09.03.2020 14:50	2 hours 50 min	all LiDAR data missing
09.03.2020 22:40	2 hours 40 min	all LiDAR data missing
10.03.2020 01:20	10 min	30m 40m 60m 100m 120m 140m 160m 200m
10.03.2020 05:20	2 hours 10 min	all LiDAR data missing
10.03.2020 12:50	1 hours 20 min	all LiDAR data missing
10.03.2020 17:10	3 hours 10 min	all LiDAR data missing
11.03.2020 01:30	2 hours 40 min	all LiDAR data missing
11.03.2020 17:00	2 hours 40 min	all LiDAR data missing
12.03.2020 00:10	2 hours 30 min	all LiDAR data missing
12.03.2020 07:00	30 min	all LiDAR data missing
12.03.2020 09:30	10 min	all LiDAR data missing
12.03.2020 17:30	1 hours 50 min	all LiDAR data missing
12.03.2020 19:20	10 min	30m 60m 80m 100m
12.03.2020 23:10	10 min	40m
12.03.2020 23:20	1 hours 50 min	all LiDAR data missing
13.03.2020 04:40	1 hours 40 min	all LiDAR data missing
13.03.2020 17:50	1 hours 10 min	all LiDAR data missing
13.03.2020 21:40	10 min	80m 100m 200m
13.03.2020 21:50	1 hours 20 min	all LiDAR data missing

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
14.03.2020 02:20	1 hours 30 min	all LiDAR data missing
14.03.2020 17:40	1 hours 30 min	all LiDAR data missing
14.03.2020 22:20	1 hours 30 min	all LiDAR data missing
15.03.2020 03:10	1 hours 40 min	all LiDAR data missing
15.03.2020 10:40	10 min	30m 40m 60m 80m 100m 180m
15.03.2020 11:40	20 min	all LiDAR data missing
15.03.2020 13:30	1 hours 20 min	all LiDAR data missing
15.03.2020 17:40	2 hours 40 min	all LiDAR data missing
15.03.2020 20:20	10 min	30m 40m 60m 80m 100m 140m 180m
15.03.2020 22:10	10 min	180m
15.03.2020 22:20	10 min	80m 100m 120m 160-250m
15.03.2020 22:30	10 min	160m
16.03.2020 01:40	2 hours 30 min	all LiDAR data missing
16.03.2020 14:10	1 hours 20 min	all LiDAR data missing
16.03.2020 18:50	2 hours 30 min	all LiDAR data missing
17.03.2020 02:10	2 hours 20 min	all LiDAR data missing
17.03.2020 11:30	10 min	all LiDAR data missing
17.03.2020 11:40	10 min	30m 60m
17.03.2020 16:10	10 min	all LiDAR data missing
17.03.2020 16:20	10 min	40m 100m 140m 160m
17.03.2020 17:20	10 min	40m
17.03.2020 17:30	2 hours 20 min	all LiDAR data missing
18.03.2020 00:20	2 hours 30 min	all LiDAR data missing
18.03.2020 07:40	1 hours 40 min	all LiDAR data missing
18.03.2020 11:10	10 min	250m
18.03.2020 11:20	1 hours 20 min	80-250m
18.03.2020 13:30	10 min	30m 40m 60m 80m 120m 140m 160m 200-250m
18.03.2020 13:40	30 min	all LiDAR data missing
18.03.2020 14:10	10 min	40m 80-250m
18.03.2020 16:20	10 min	30m
18.03.2020 16:30	2 hours 20 min	all LiDAR data missing
18.03.2020 23:40	2 hours 20 min	all LiDAR data missing
19.03.2020 06:50	1 hours 10 min	all LiDAR data missing
19.03.2020 17:30	2 hours 20 min	all LiDAR data missing
20.03.2020 00:40	2 hours 20 min	all LiDAR data missing
20.03.2020 09:40	20 min	all LiDAR data missing
20.03.2020 10:00	10 min	60m 100m
20.03.2020 16:10	10 min	all LiDAR data missing
20.03.2020 17:10	2 hours 20 min	all LiDAR data missing
20.03.2020 23:40	2 hours 30 min	all LiDAR data missing
21.03.2020 17:50	2 hours 00 min	all LiDAR data missing

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
21.03.2020 23:30	2 hours 00 min	all LiDAR data missing
22.03.2020 01:30	10 min	30m 60m 80m 120m 160m
22.03.2020 05:20	1 hours 10 min	all LiDAR data missing
22.03.2020 19:20	10 min	40m 60m 80m 100m 140-250m
22.03.2020 19:30	50 min	all LiDAR data missing
22.03.2020 22:20	10 min	40m 60m 80m 100m 140m
22.03.2020 22:30	1 hours 00 min	all LiDAR data missing
23.03.2020 01:50	1 hours 20 min	all LiDAR data missing
23.03.2020 06:00	30 min	all LiDAR data missing
23.03.2020 18:30	10 min	30m 40m 80m
23.03.2020 18:40	40 min	all LiDAR data missing
23.03.2020 19:20	10 min	30m 40m 60m
23.03.2020 21:10	50 min	all LiDAR data missing
23.03.2020 23:30	50 min	all LiDAR data missing
24.03.2020 00:20	10 min	30m 40m 60m 80m 100m 120m 140m 160m 250m
24.03.2020 02:00	10 min	30m 40m 60m 80m 120m 140m 160m 180m 200m
24.03.2020 02:10	40 min	all LiDAR data missing
24.03.2020 02:50	10 min	30m 120m
24.03.2020 04:40	50 min	all LiDAR data missing
24.03.2020 17:20	20 min	all LiDAR data missing
24.03.2020 18:20	20 min	all LiDAR data missing
24.03.2020 19:30	20 min	all LiDAR data missing
24.03.2020 20:40	20 min	all LiDAR data missing
24.03.2020 22:00	20 min	all LiDAR data missing
24.03.2020 23:10	1 hours 10 min	all LiDAR data missing
25.03.2020 00:20	10 min	30m 100m 180m
25.03.2020 02:40	50 min	all LiDAR data missing
25.03.2020 05:20	10 min	40m 80m 120m 140m
25.03.2020 05:30	30 min	all LiDAR data missing
25.03.2020 06:00	10 min	80m
25.03.2020 17:20	10 min	all LiDAR data missing
25.03.2020 18:10	20 min	all LiDAR data missing
25.03.2020 19:20	30 min	all LiDAR data missing
25.03.2020 20:40	50 min	all LiDAR data missing
25.03.2020 23:00	1 hours 00 min	all LiDAR data missing
26.03.2020 00:00	10 min	30m 60m 160m
26.03.2020 02:00	10 min	80m
26.03.2020 02:10	1 hours 20 min	all LiDAR data missing
26.03.2020 06:00	20 min	all LiDAR data missing
26.03.2020 08:00	10 min	all LiDAR data missing
26.03.2020 17:30	20 min	all LiDAR data missing

Table E.3: Gaps in the wind dataset of Deployment 3 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
26.03.2020 18:10	20 min	all LiDAR data missing
26.03.2020 18:30	10 min	40m 100m 120m 140m 160m 180m
26.03.2020 19:10	30 min	all LiDAR data missing
26.03.2020 19:50	40 min	all LiDAR data missing
26.03.2020 20:50	10 min	30m 40m 100m
26.03.2020 21:00	30 min	all LiDAR data missing
26.03.2020 21:30	10 min	30m 40m 60m 80m 100m 140m
26.03.2020 22:10	1 hours 10 min	all LiDAR data missing
26.03.2020 23:50	367 hours 10 min	all LiDAR data missing

E.4 Deployment 4

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.04.2020 06:10	10 min	200-250m
11.04.2020 10:00	20 min	180-250m
11.04.2020 10:20	10 min	160-250m
11.04.2020 10:30	30 min	180-250m
11.04.2020 11:00	20 min	200-250m
12.04.2020 11:40	10 min	250m
12.04.2020 11:50	10 min	200-250m
12.04.2020 12:00	30 min	250m
12.04.2020 15:30	20 min	250m
12.04.2020 15:50	30 min	180-250m
12.04.2020 16:20	10 min	200-250m
12.04.2020 16:50	20 min	180-250m
16.04.2020 04:40	20 min	250m
16.04.2020 05:20	1 hours 40 min	250m
16.04.2020 07:00	20 min	180-250m
16.04.2020 07:20	10 min	160-250m
16.04.2020 07:30	20 min	180-250m
16.04.2020 07:50	20 min	250m
24.04.2020 04:30	10 min	180-250m
24.04.2020 14:50	10 min	80m 100m 120m 140m 160m 180m 250m
24.04.2020 22:20	10 min	Gill data missing
28.04.2020 05:40	10 min	250m
28.04.2020 07:50	20 min	250m
29.04.2020 07:50	10 min	200m
01.05.2020 02:20	10 min	180-250m
01.05.2020 02:30	10 min	140-250m
01.05.2020 10:50	10 min	250m
08.05.2020 05:50	10 min	Gill data missing
09.05.2020 02:50	10 min	180m
09.05.2020 03:00	20 min	140-250m
09.05.2020 03:20	10 min	120-250m
09.05.2020 03:30	10 min	140-250m
09.05.2020 03:40	10 min	120-250m
09.05.2020 03:50	20 min	100-250m
09.05.2020 04:10	20 min	120-250m
09.05.2020 04:30	10 min	100-250m
09.05.2020 04:40	10 min	120-250m
09.05.2020 04:50	10 min	100-250m
09.05.2020 05:00	10 min	120-250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
09.05.2020 05:10	20 min	100-250m
09.05.2020 05:30	10 min	120-250m
09.05.2020 05:40	20 min	160-250m
09.05.2020 06:00	10 min	140-250m
09.05.2020 06:10	10 min	120-250m
09.05.2020 06:20	20 min	140-250m
09.05.2020 06:40	30 min	120-250m
09.05.2020 07:10	20 min	160-250m
09.05.2020 07:30	10 min	180-250m
09.05.2020 07:40	10 min	250m
09.05.2020 07:50	10 min	160-250m
09.05.2020 08:00	10 min	140-250m
09.05.2020 08:10	30 min	160-250m
09.05.2020 13:00	10 min	250m
09.05.2020 13:10	10 min	200-250m
09.05.2020 13:20	10 min	140-250m
09.05.2020 13:30	10 min	160-250m
09.05.2020 13:40	10 min	140-250m
09.05.2020 13:50	30 min	120-250m
09.05.2020 14:20	40 min	100-250m
09.05.2020 15:00	20 min	120-250m
09.05.2020 15:20	1 hours 50 min	60-250m
09.05.2020 17:10	10 min	80-250m
09.05.2020 17:20	10 min	100-250m
09.05.2020 17:30	10 min	160-250m
09.05.2020 17:40	10 min	180-250m
09.05.2020 17:50	10 min	160-250m
09.05.2020 18:00	10 min	120-250m
09.05.2020 18:10	20 min	60-250m
09.05.2020 18:30	10 min	80-250m
09.05.2020 18:40	20 min	60-250m
09.05.2020 19:00	30 min	80-250m
09.05.2020 19:30	10 min	60-250m
09.05.2020 19:40	10 min	80-250m
09.05.2020 19:50	10 min	60-250m
09.05.2020 20:00	1 hours 40 min	80-250m
09.05.2020 21:40	20 min	60-250m
09.05.2020 22:00	20 min	80-250m
09.05.2020 22:20	40 min	60-250m
09.05.2020 23:00	40 min	80-250m
09.05.2020 23:40	10 min	60-250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
09.05.2020 23:50	20 min	80-250m
10.05.2020 00:10	10 min	60-250m
10.05.2020 00:20	20 min	80-250m
10.05.2020 00:40	20 min	60-250m
10.05.2020 01:00	40 min	80-250m
10.05.2020 01:40	2 hours 10 min	60-250m
10.05.2020 03:50	10 min	100m 140-250m
10.05.2020 07:00	10 min	100-250m
10.05.2020 07:10	10 min	250m
10.05.2020 07:20	10 min	160-250m
10.05.2020 07:30	20 min	200-250m
10.05.2020 09:20	10 min	160m 200-250m
10.05.2020 10:00	10 min	250m
19.05.2020 17:50	10 min	140-250m
19.05.2020 18:30	10 min	120-250m
19.05.2020 19:10	20 min	120-250m
19.05.2020 19:30	30 min	140-250m
19.05.2020 20:00	10 min	100-250m
19.05.2020 20:10	20 min	80-250m
19.05.2020 20:30	10 min	100-250m
19.05.2020 20:40	20 min	80-250m
19.05.2020 21:00	20 min	60-250m
19.05.2020 21:20	10 min	80-250m
19.05.2020 21:30	1 hours 00 min	60-250m
19.05.2020 22:30	10 min	80-250m
19.05.2020 22:40	10 min	120-250m
19.05.2020 22:50	10 min	140-250m
19.05.2020 23:00	10 min	160-250m
19.05.2020 23:20	10 min	80-250m
19.05.2020 23:30	20 min	100-250m
19.05.2020 23:50	2 hours 00 min	80-250m
20.05.2020 01:50	30 min	60-250m
20.05.2020 02:20	20 min	80-250m
20.05.2020 02:40	20 min	60-250m
20.05.2020 03:00	20 min	80-250m
20.05.2020 03:20	1 hours 30 min	60-250m
20.05.2020 04:50	10 min	40-250m
20.05.2020 05:00	40 min	60-250m
20.05.2020 05:40	10 min	60m 80m 100m
20.05.2020 05:50	10 min	80-250m
20.05.2020 06:10	10 min	100-250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.05.2020 06:20	10 min	100m 120m 140m 160m 180m 200m
20.05.2020 06:30	10 min	100m 120m 140m 160m
20.05.2020 06:40	40 min	100m 120m 140m
20.05.2020 07:20	20 min	100m 120m 140m 160m 180m
20.05.2020 17:50	40 min	140m
20.05.2020 19:00	10 min	160m
20.05.2020 19:40	10 min	200-250m
20.05.2020 20:10	20 min	200-250m
21.05.2020 01:10	10 min	80-250m
21.05.2020 01:20	40 min	60-250m
21.05.2020 02:00	30 min	80-250m
21.05.2020 02:30	50 min	60-250m
21.05.2020 03:20	10 min	80-250m
21.05.2020 03:30	10 min	60-250m
21.05.2020 03:40	20 min	80-250m
21.05.2020 04:00	30 min	60-250m
21.05.2020 04:30	10 min	80-250m
21.05.2020 04:40	40 min	60-250m
21.05.2020 05:20	20 min	80-250m
21.05.2020 05:40	40 min	60-250m
21.05.2020 06:20	10 min	80-250m
21.05.2020 06:30	50 min	60-250m
21.05.2020 07:20	10 min	180-250m
21.05.2020 12:30	10 min	Gill data missing
22.05.2020 07:00	10 min	60-250m
22.05.2020 07:40	10 min	100-250m
22.05.2020 13:20	10 min	160m 180m 200m
22.05.2020 13:30	20 min	160-250m
22.05.2020 13:50	20 min	180-250m
22.05.2020 14:10	20 min	200-250m
25.05.2020 16:40	20 min	250m
25.05.2020 17:10	20 min	250m
25.05.2020 17:30	20 min	200-250m
25.05.2020 17:50	20 min	250m
25.05.2020 18:10	10 min	200-250m
25.05.2020 18:20	10 min	250m
25.05.2020 18:30	10 min	180m 250m
25.05.2020 18:50	10 min	160m 180m 250m
25.05.2020 19:00	30 min	200-250m
25.05.2020 19:30	1 hours 00 min	250m
25.05.2020 20:40	10 min	250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
25.05.2020 22:00	10 min	120m 140m 160m 180m
25.05.2020 22:50	20 min	100-250m
25.05.2020 23:10	20 min	80-250m
25.05.2020 23:30	50 min	60-250m
26.05.2020 00:20	30 min	80-250m
26.05.2020 00:50	1 hours 40 min	60-250m
26.05.2020 02:30	10 min	80-250m
26.05.2020 02:40	2 hours 00 min	60-250m
26.05.2020 04:40	10 min	80-250m
26.05.2020 04:50	10 min	60-250m
26.05.2020 05:00	10 min	80-250m
26.05.2020 05:10	10 min	60-250m
26.05.2020 05:20	10 min	80-250m
26.05.2020 05:30	40 min	60-250m
26.05.2020 06:10	40 min	80-250m
26.05.2020 23:40	10 min	200-250m
26.05.2020 23:50	10 min	140-250m
27.05.2020 00:00	10 min	120-250m
27.05.2020 00:10	40 min	100-250m
27.05.2020 00:50	40 min	60-250m
27.05.2020 01:30	30 min	80-250m
27.05.2020 02:00	10 min	100-250m
27.05.2020 03:50	10 min	180m 250m
27.05.2020 04:00	10 min	140-250m
27.05.2020 04:10	10 min	200-250m
27.05.2020 04:20	10 min	80-250m
27.05.2020 04:30	10 min	120-250m
27.05.2020 04:40	10 min	160-250m
27.05.2020 04:50	10 min	120-250m
27.05.2020 05:00	10 min	140-250m
27.05.2020 05:10	10 min	160-250m
27.05.2020 05:40	10 min	200-250m
27.05.2020 08:10	10 min	120-250m
27.05.2020 08:20	10 min	160-250m
27.05.2020 08:40	10 min	180-250m
27.05.2020 09:20	20 min	250m
03.06.2020 07:20	10 min	200-250m
03.06.2020 07:40	20 min	200-250m
03.06.2020 11:30	10 min	180-250m
03.06.2020 11:40	10 min	120-250m
03.06.2020 11:50	20 min	200-250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
03.06.2020 12:20	10 min	250m
03.06.2020 12:30	20 min	200-250m
03.06.2020 12:50	10 min	180-250m
03.06.2020 13:00	10 min	250m
03.06.2020 13:10	10 min	160-250m
03.06.2020 13:20	10 min	250m
03.06.2020 13:30	10 min	180-250m
03.06.2020 13:40	30 min	250m
04.06.2020 01:40	10 min	Gill data missing
05.06.2020 08:20	10 min	30m 40m 60m 100m 140m 160m
05.06.2020 08:30	10 min	30m 40m 60m 120m
05.06.2020 10:00	10 min	160m 250m
05.06.2020 10:20	10 min	30m 60m 100m 120m
05.06.2020 10:30	10 min	140m
05.06.2020 11:10	10 min	250m
05.06.2020 15:10	10 min	250m
06.06.2020 22:20	10 min	80-250m
06.06.2020 22:30	10 min	80-250m
06.06.2020 23:10	10 min	40m 60m 180m
07.06.2020 19:20	10 min	60m
08.06.2020 13:20	10 min	80m 120m
08.06.2020 13:30	10 min	200m
08.06.2020 21:10	10 min	all LiDAR data missing
12.06.2020 06:50	10 min	Gill data missing
12.06.2020 09:10	10 min	180m
12.06.2020 09:30	10 min	80-250m
12.06.2020 09:40	10 min	120m 160m 200m
12.06.2020 10:00	10 min	180m 250m
12.06.2020 10:10	10 min	80-250m
13.06.2020 00:20	10 min	all LiDAR data missing
13.06.2020 09:10	10 min	all LiDAR data missing
13.06.2020 09:20	1 hours 00 min	80-250m
13.06.2020 10:20	30 min	60-250m
13.06.2020 10:50	1 hours 20 min	80-250m
13.06.2020 12:10	20 min	100-250m
13.06.2020 12:30	30 min	80-250m
13.06.2020 13:00	50 min	60-250m
13.06.2020 13:50	30 min	80-250m
13.06.2020 14:20	10 min	100-250m
13.06.2020 14:30	20 min	120-250m
13.06.2020 15:40	10 min	80-250m

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
13.06.2020 18:30	10 min	120m
13.06.2020 19:40	10 min	all LiDAR data missing
14.06.2020 08:00	10 min	all LiDAR data missing
14.06.2020 10:20	10 min	80-250m
14.06.2020 11:10	10 min	160-250m
14.06.2020 13:30	10 min	Gill data missing
14.06.2020 17:00	20 min	80-250m
14.06.2020 17:20	10 min	100-250m
14.06.2020 18:00	10 min	120m 180m 200m
14.06.2020 18:10	10 min	all LiDAR data missing
15.06.2020 14:20	20 min	80-250m
15.06.2020 14:40	30 min	60-250m
15.06.2020 15:10	30 min	80-250m
15.06.2020 15:40	1 hours 20 min	60-250m
15.06.2020 17:00	1 hours 20 min	80-250m
15.06.2020 18:20	1 hours 20 min	60-250m
15.06.2020 19:40	20 min	80-250m
16.06.2020 10:40	10 min	80m 100m
16.06.2020 11:10	10 min	140m
16.06.2020 11:20	10 min	60m 80m
16.06.2020 11:30	10 min	60m 80m 100m
16.06.2020 13:10	10 min	30m 60-250m
16.06.2020 14:30	10 min	100m 160-250m
16.06.2020 14:40	10 min	30m 80-250m
16.06.2020 14:50	10 min	30m 60-250m
16.06.2020 15:40	10 min	80-250m
16.06.2020 15:50	10 min	80m 100m 120m 140m 160m 200-250m
16.06.2020 16:00	10 min	120m
16.06.2020 16:10	10 min	40m 80-250m
16.06.2020 16:20	10 min	30m 40m 80-250m
16.06.2020 16:30	10 min	30m 80-250m
16.06.2020 16:40	30 min	30m 40m 80-250m
16.06.2020 17:10	10 min	80-250m
16.06.2020 17:20	20 min	30m 40m 80-250m
16.06.2020 17:40	1 hours 00 min	30m 80-250m
16.06.2020 19:00	10 min	100m
16.06.2020 19:20	10 min	160m
16.06.2020 20:30	10 min	all LiDAR data missing
17.06.2020 08:00	10 min	140m 200-250m
17.06.2020 10:30	10 min	160m
19.06.2020 22:50	10 min	all LiDAR data missing

Table E.4: Gaps in the wind dataset of Deployment 4 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
21.06.2020 00:10	10 min	all LiDAR data missing
21.06.2020 08:00	10 min	all LiDAR data missing
22.06.2020 06:50	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m

E.5 Deployment 5

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.04.2020 10:00	10 min	180m
11.04.2020 10:30	10 min	200m
11.04.2020 10:40	10 min	180-250m
12.04.2020 11:40	10 min	250m
12.04.2020 11:50	10 min	200-250m
12.04.2020 12:00	40 min	250m
12.04.2020 15:30	20 min	250m
12.04.2020 15:50	10 min	200-250m
12.04.2020 16:00	30 min	180-250m
12.04.2020 16:50	10 min	180-250m
12.04.2020 17:00	10 min	200-250m
16.04.2020 04:40	30 min	250m
16.04.2020 05:30	20 min	250m
16.04.2020 05:50	1 hours 10 min	200-250m
16.04.2020 07:00	10 min	180-250m
16.04.2020 07:10	30 min	160-250m
16.04.2020 07:40	10 min	180-250m
16.04.2020 07:50	20 min	200-250m
16.04.2020 08:10	10 min	250m
24.04.2020 01:50	10 min	Gill data missing
26.04.2020 08:30	10 min	250m
28.04.2020 00:50	10 min	180-250m
28.04.2020 06:40	10 min	250m
28.04.2020 07:50	10 min	250m
28.04.2020 08:10	10 min	250m
01.05.2020 02:20	10 min	160-250m
01.05.2020 02:30	10 min	120-250m
07.05.2020 14:40	10 min	Gill data missing
09.05.2020 02:50	10 min	160-250m
09.05.2020 03:00	20 min	140-250m
09.05.2020 03:20	20 min	120-250m
09.05.2020 03:40	10 min	100-250m
09.05.2020 03:50	10 min	120-250m
09.05.2020 04:00	40 min	100-250m
09.05.2020 04:40	10 min	120-250m
09.05.2020 04:50	20 min	100-250m
09.05.2020 05:10	10 min	80-250m
09.05.2020 05:20	10 min	100-250m
09.05.2020 05:40	20 min	160-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
09.05.2020 06:00	10 min	140-250m
09.05.2020 06:10	20 min	120-250m
09.05.2020 06:30	10 min	140-250m
09.05.2020 06:40	20 min	120-250m
09.05.2020 07:00	10 min	100-250m
09.05.2020 07:10	20 min	140-250m
09.05.2020 07:30	10 min	180-250m
09.05.2020 07:40	10 min	250m
09.05.2020 07:50	10 min	160-250m
09.05.2020 08:00	10 min	140-250m
09.05.2020 08:10	10 min	160-250m
09.05.2020 08:20	10 min	140-250m
09.05.2020 08:30	10 min	160m 200m
09.05.2020 10:20	10 min	250m
09.05.2020 13:10	10 min	200-250m
09.05.2020 13:20	20 min	160-250m
09.05.2020 13:40	40 min	120-250m
09.05.2020 14:20	30 min	100-250m
09.05.2020 14:50	10 min	120-250m
09.05.2020 15:00	30 min	100-250m
09.05.2020 15:30	1 hours 30 min	60-250m
09.05.2020 17:00	20 min	80-250m
09.05.2020 17:20	10 min	120-250m
09.05.2020 17:30	30 min	180-250m
09.05.2020 18:00	10 min	120-250m
09.05.2020 18:10	20 min	60-250m
09.05.2020 18:30	10 min	80-250m
09.05.2020 18:40	20 min	60-250m
09.05.2020 19:00	30 min	80-250m
09.05.2020 19:30	10 min	60-250m
09.05.2020 19:40	10 min	80-250m
09.05.2020 19:50	10 min	60-250m
09.05.2020 20:00	1 hours 30 min	80-250m
09.05.2020 21:30	1 hours 40 min	60-250m
09.05.2020 23:10	40 min	80-250m
09.05.2020 23:50	10 min	60-250m
10.05.2020 00:00	10 min	80-250m
10.05.2020 00:10	10 min	60-250m
10.05.2020 00:20	10 min	80-250m
10.05.2020 00:30	20 min	60-250m
10.05.2020 00:50	30 min	80-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
10.05.2020 01:20	2 hours 20 min	60-250m
10.05.2020 03:40	10 min	180-250m
10.05.2020 03:50	10 min	100-250m
10.05.2020 07:00	10 min	250m
10.05.2020 07:20	10 min	160-250m
10.05.2020 07:30	20 min	180-250m
19.05.2020 17:50	10 min	140m 160m 180m
19.05.2020 18:30	10 min	140m 160m 180m
19.05.2020 19:10	10 min	140-250m
19.05.2020 19:20	20 min	120-250m
19.05.2020 19:40	20 min	140-250m
19.05.2020 20:00	10 min	100-250m
19.05.2020 20:10	50 min	80-250m
19.05.2020 21:00	1 hours 30 min	60-250m
19.05.2020 22:30	10 min	80-250m
19.05.2020 22:40	10 min	120-250m
19.05.2020 22:50	10 min	140-250m
19.05.2020 23:00	10 min	160-250m
19.05.2020 23:10	10 min	180-250m
19.05.2020 23:20	30 min	100-250m
19.05.2020 23:50	2 hours 00 min	80-250m
20.05.2020 01:50	40 min	60-250m
20.05.2020 02:30	10 min	80-250m
20.05.2020 02:40	30 min	60-250m
20.05.2020 03:10	10 min	80-250m
20.05.2020 03:20	1 hours 30 min	60-250m
20.05.2020 04:50	10 min	40-250m
20.05.2020 05:00	30 min	60-250m
20.05.2020 05:30	10 min	60m 80m 100m 120m 140m 160m 180m
20.05.2020 05:40	10 min	60m 80m
20.05.2020 05:50	10 min	80m 100m 120m 180-250m
20.05.2020 06:10	10 min	120-250m
20.05.2020 06:20	10 min	100m 120m 140m 160m 180m
20.05.2020 06:30	10 min	100m 120m 140m 160m
20.05.2020 06:40	20 min	100m 120m 140m
20.05.2020 07:00	10 min	100m 120m
20.05.2020 07:10	10 min	100m 120m 140m
20.05.2020 07:20	10 min	100m 120m 140m 160m 180m
20.05.2020 07:30	10 min	100m 120m 140m 160m
20.05.2020 13:20	10 min	Gill data missing
20.05.2020 17:50	10 min	140m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.05.2020 19:40	10 min	200m
20.05.2020 20:00	20 min	180-250m
20.05.2020 20:20	10 min	200m
21.05.2020 01:10	50 min	60-250m
21.05.2020 02:00	30 min	80-250m
21.05.2020 02:30	1 hours 10 min	60-250m
21.05.2020 03:40	30 min	80-250m
21.05.2020 04:10	3 hours 10 min	60-250m
21.05.2020 07:20	10 min	180-250m
22.05.2020 07:00	10 min	60-250m
22.05.2020 07:30	10 min	140m 180-250m
22.05.2020 13:20	10 min	160m 180m
22.05.2020 13:30	10 min	160m 180m 200m
22.05.2020 13:40	10 min	140-250m
22.05.2020 13:50	20 min	160-250m
22.05.2020 14:10	20 min	180-250m
22.05.2020 14:30	10 min	250m
25.05.2020 15:50	10 min	250m
25.05.2020 16:40	40 min	250m
25.05.2020 17:20	10 min	200-250m
25.05.2020 17:30	10 min	180-250m
25.05.2020 17:40	10 min	200-250m
25.05.2020 17:50	20 min	250m
25.05.2020 18:10	10 min	200-250m
25.05.2020 18:20	10 min	160m 180m 250m
25.05.2020 18:30	10 min	200-250m
25.05.2020 18:40	10 min	140m 160m 180m 250m
25.05.2020 19:00	10 min	160-250m
25.05.2020 19:10	20 min	180-250m
25.05.2020 19:30	30 min	250m
25.05.2020 20:00	10 min	180-250m
25.05.2020 20:10	10 min	250m
25.05.2020 20:20	10 min	200-250m
25.05.2020 20:30	10 min	250m
25.05.2020 20:40	10 min	200-250m
25.05.2020 22:20	10 min	80m
25.05.2020 22:30	20 min	60m 80m 100m
25.05.2020 22:50	10 min	100-250m
25.05.2020 23:00	10 min	80-250m
25.05.2020 23:10	3 hours 50 min	60-250m
26.05.2020 03:00	10 min	80-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
26.05.2020 03:10	3 hours 00 min	60-250m
26.05.2020 06:10	40 min	80-250m
26.05.2020 23:50	10 min	140-250m
27.05.2020 00:00	10 min	120-250m
27.05.2020 00:10	20 min	100-250m
27.05.2020 00:30	20 min	80-250m
27.05.2020 00:50	20 min	60-250m
27.05.2020 01:10	10 min	80-250m
27.05.2020 01:20	10 min	60-250m
27.05.2020 01:30	10 min	80-250m
27.05.2020 01:40	10 min	60-250m
27.05.2020 01:50	10 min	80-250m
27.05.2020 02:00	20 min	140-250m
27.05.2020 04:00	10 min	180-250m
27.05.2020 04:10	10 min	250m
27.05.2020 04:20	10 min	100-250m
27.05.2020 04:30	30 min	120-250m
27.05.2020 05:00	20 min	160-250m
27.05.2020 08:10	10 min	120-250m
27.05.2020 08:20	10 min	200-250m
27.05.2020 08:40	10 min	180-250m
27.05.2020 08:50	10 min	250m
27.05.2020 09:20	10 min	250m
02.06.2020 08:50	10 min	250m
02.06.2020 23:40	10 min	Gill data missing
03.06.2020 07:20	10 min	200-250m
03.06.2020 07:30	10 min	250m
03.06.2020 07:40	10 min	200-250m
03.06.2020 07:50	10 min	250m
03.06.2020 11:30	10 min	160-250m
03.06.2020 11:40	10 min	120-250m
03.06.2020 11:50	20 min	250m
03.06.2020 12:20	10 min	250m
03.06.2020 12:30	20 min	200-250m
03.06.2020 12:50	30 min	180-250m
03.06.2020 13:20	10 min	250m
03.06.2020 13:30	10 min	180-250m
03.06.2020 13:40	30 min	250m
03.06.2020 14:20	10 min	250m
05.06.2020 08:20	20 min	30m 80m 100m
05.06.2020 10:20	10 min	40m 80m 100m 120m 200m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
05.06.2020 11:00	10 min	180m 200m
06.06.2020 22:10	10 min	140m 180m 250m
06.06.2020 22:20	10 min	60-250m
06.06.2020 22:30	10 min	160m 250m
06.06.2020 23:20	10 min	80m
07.06.2020 19:30	10 min	40m
07.06.2020 19:50	10 min	180m
12.06.2020 05:50	10 min	160m
13.06.2020 00:50	1 hours 00 min	80-250m
13.06.2020 01:50	10 min	100-250m
13.06.2020 02:00	10 min	180-250m
13.06.2020 02:40	10 min	120-250m
13.06.2020 02:50	10 min	80-250m
13.06.2020 03:00	20 min	100-250m
13.06.2020 03:20	2 hours 00 min	80-250m
13.06.2020 05:20	10 min	60-250m
13.06.2020 05:30	40 min	80-250m
13.06.2020 06:10	20 min	100-250m
13.06.2020 06:30	10 min	120-250m
13.06.2020 07:30	10 min	140-250m
13.06.2020 07:40	10 min	100-250m
13.06.2020 07:50	10 min	80-250m
13.06.2020 08:00	10 min	100m 120m 250m
13.06.2020 08:20	20 min	100-250m
13.06.2020 08:40	1 hours 30 min	80-250m
13.06.2020 10:10	30 min	60-250m
13.06.2020 10:40	1 hours 00 min	80-250m
13.06.2020 11:40	20 min	100-250m
13.06.2020 12:00	10 min	80-250m
13.06.2020 12:10	10 min	120-250m
13.06.2020 12:20	10 min	100-250m
13.06.2020 12:30	30 min	80-250m
13.06.2020 13:00	40 min	60-250m
13.06.2020 13:40	40 min	80-250m
13.06.2020 14:20	10 min	100-250m
13.06.2020 14:30	20 min	120-250m
13.06.2020 21:40	10 min	160m
14.06.2020 01:40	10 min	250m
14.06.2020 10:20	10 min	80-250m
14.06.2020 11:00	10 min	180-250m
14.06.2020 11:10	10 min	200-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
14.06.2020 23:30	10 min	180-250m
15.06.2020 00:50	10 min	60m 80m
15.06.2020 04:10	10 min	80m 100m
15.06.2020 06:20	10 min	Gill data missing
15.06.2020 14:20	20 min	80-250m
15.06.2020 14:40	30 min	60-250m
15.06.2020 15:10	30 min	80-250m
15.06.2020 15:40	20 min	60-250m
15.06.2020 16:00	10 min	80-250m
15.06.2020 16:10	50 min	60-250m
15.06.2020 17:00	1 hours 10 min	80-250m
15.06.2020 18:10	1 hours 30 min	60-250m
15.06.2020 19:40	20 min	80-250m
15.06.2020 20:00	10 min	60-250m
15.06.2020 20:10	20 min	80-250m
15.06.2020 20:30	10 min	80-250m
15.06.2020 20:40	10 min	80-250m
15.06.2020 20:50	10 min	60-250m
15.06.2020 21:00	10 min	80m 100m 120m 140m 160m 180m 200m
15.06.2020 21:10	10 min	100m 120m 140m 200m
15.06.2020 21:20	10 min	60-250m
15.06.2020 21:30	10 min	30m 60-250m
15.06.2020 21:40	10 min	60m 100-250m
15.06.2020 21:50	10 min	100m 120m 140m 160m 180m 200m
15.06.2020 22:00	20 min	30m 60-250m
15.06.2020 22:20	10 min	30m 120m 250m
15.06.2020 22:30	10 min	30m 60-250m
15.06.2020 22:40	10 min	100m
15.06.2020 22:50	10 min	100m 120m 140m 160m 180m 200m
15.06.2020 23:00	10 min	100m 120m 180m
15.06.2020 23:10	10 min	120m 180m
15.06.2020 23:20	10 min	80m 100m 120m 160m
15.06.2020 23:30	10 min	160-250m
15.06.2020 23:40	30 min	140-250m
16.06.2020 00:10	10 min	120-250m
16.06.2020 00:20	10 min	100-250m
16.06.2020 00:30	10 min	120-250m
16.06.2020 00:40	10 min	100-250m
16.06.2020 00:50	10 min	80-250m
16.06.2020 01:00	20 min	100-250m
16.06.2020 01:20	20 min	80-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.06.2020 01:40	10 min	120-250m
16.06.2020 01:50	40 min	80-250m
16.06.2020 02:30	10 min	120-250m
16.06.2020 02:40	1 hours 40 min	60-250m
16.06.2020 04:20	10 min	100-250m
16.06.2020 05:20	10 min	140-250m
16.06.2020 05:30	10 min	120-250m
16.06.2020 05:40	10 min	160-250m
16.06.2020 10:50	10 min	80m
16.06.2020 11:10	10 min	80m
16.06.2020 14:40	20 min	80-250m
16.06.2020 15:50	10 min	80-250m
16.06.2020 16:30	10 min	80-250m
16.06.2020 16:40	20 min	30m 80-250m
16.06.2020 17:00	10 min	80-250m
16.06.2020 17:10	10 min	200m
16.06.2020 17:20	10 min	80-250m
16.06.2020 17:30	1 hours 10 min	30m 80-250m
16.06.2020 19:00	10 min	80-250m
16.06.2020 19:30	10 min	30m
16.06.2020 20:40	20 min	250m
16.06.2020 21:00	10 min	180-250m
16.06.2020 21:10	10 min	140-250m
16.06.2020 21:20	10 min	180-250m
16.06.2020 21:30	10 min	40m
16.06.2020 21:40	30 min	120-250m
16.06.2020 22:10	10 min	100-250m
16.06.2020 22:20	30 min	120-250m
16.06.2020 22:50	1 hours 10 min	100-250m
17.06.2020 00:00	20 min	80-250m
17.06.2020 00:20	30 min	100-250m
17.06.2020 00:50	20 min	140-250m
17.06.2020 01:10	30 min	120-250m
17.06.2020 01:40	20 min	100-250m
17.06.2020 02:00	20 min	120-250m
17.06.2020 02:20	10 min	100-250m
17.06.2020 02:30	30 min	120-250m
17.06.2020 03:00	20 min	100-250m
17.06.2020 03:20	10 min	120-250m
17.06.2020 03:30	40 min	100-250m
17.06.2020 04:10	10 min	120-250m

Table E.5: Gaps in the wind dataset of Deployment 5 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.06.2020 04:20	20 min	100-250m
17.06.2020 04:40	10 min	80-250m
17.06.2020 04:50	10 min	140-250m
17.06.2020 05:00	10 min	180-250m
17.06.2020 05:10	20 min	100-250m
17.06.2020 05:30	10 min	120-250m
17.06.2020 05:40	10 min	140-250m
17.06.2020 05:50	20 min	100-250m
17.06.2020 06:10	10 min	120-250m
17.06.2020 06:20	10 min	180-250m
17.06.2020 06:30	10 min	120-250m
17.06.2020 06:40	10 min	160-250m
17.06.2020 06:50	10 min	30m 80-250m
17.06.2020 07:00	10 min	180-250m
17.06.2020 07:10	10 min	250m
17.06.2020 07:30	30 min	30m 80-250m
17.06.2020 08:00	10 min	200m
17.06.2020 08:40	10 min	200m
17.06.2020 10:30	10 min	160m
18.06.2020 22:20	10 min	250m
19.06.2020 01:10	10 min	180-250m
27.06.2020 09:20	10 min	120-250m
27.06.2020 09:30	10 min	140-250m
27.06.2020 09:40	10 min	160-250m
27.06.2020 09:50	10 min	200-250m
28.06.2020 06:10	10 min	Gill data missing
01.07.2020 18:00	10 min	160m 180m
02.07.2020 09:10	10 min	250m
02.07.2020 10:50	10 min	60-250m
02.07.2020 13:40	10 min	60m
02.07.2020 14:20	10 min	250m
02.07.2020 16:40	20 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
02.07.2020 17:10	10 min	100m
11.07.2020 19:00	10 min	Gill data missing
13.07.2020 13:30	10 min	180m 200m
13.07.2020 14:10	11 hours 30 min	all LiDAR data missing
14.07.2020 07:30	6 hours 10 min	all LiDAR data missing
14.07.2020 14:00	11 hours 40 min	all LiDAR data missing
15.07.2020 02:00	183 hours 10 min	all LiDAR data missing

E.6 Deployment 6

Table E.6: Gaps in the wind dataset of Deployment 6 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
24.06.2020 06:50	10 min	80m
24.06.2020 07:30	10 min	160-250m
27.06.2020 09:20	10 min	160-250m
27.06.2020 09:30	10 min	200-250m
27.06.2020 09:40	10 min	160-250m
28.06.2020 15:50	10 min	Gill data missing
01.07.2020 12:20	10 min	200m
02.07.2020 10:30	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
02.07.2020 10:50	10 min	all LiDAR data missing
02.07.2020 11:30	10 min	140m 160m 180m 200m
02.07.2020 12:20	10 min	250m
02.07.2020 16:40	40 min	40m 60m
11.07.2020 18:40	10 min	Gill data missing
15.07.2020 03:20	10 min	160m 180m 250m
15.07.2020 08:40	10 min	60m 100m 140-250m
15.07.2020 08:50	10 min	30m
16.07.2020 18:50	10 min	200m
16.07.2020 20:00	10 min	80-250m
16.07.2020 21:10	10 min	200-250m
16.07.2020 21:20	10 min	250m
17.07.2020 02:00	20 min	200m
17.07.2020 02:20	10 min	200-250m
17.07.2020 02:30	10 min	200m
17.07.2020 02:40	10 min	140m 160m 200-250m
17.07.2020 02:50	10 min	140-250m
17.07.2020 03:00	10 min	180-250m
17.07.2020 03:10	10 min	180m 200m
17.07.2020 03:20	10 min	160-250m
17.07.2020 04:00	10 min	200m
17.07.2020 04:30	10 min	160m 250m
17.07.2020 05:10	10 min	160m
17.07.2020 06:00	10 min	160-250m
17.07.2020 06:10	10 min	140m
17.07.2020 09:00	10 min	200m
17.07.2020 09:20	10 min	250m
18.07.2020 20:00	20 min	30m 40m 60m 80m 120m
25.07.2020 16:50	10 min	Gill data missing
06.08.2020 02:40	10 min	180m
06.08.2020 17:20	10 min	250m

Table E.6: Gaps in the wind dataset of Deployment 6 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
08.08.2020 11:40	10 min	Gill data missing
09.08.2020 03:30	20 min	250m
09.08.2020 04:20	10 min	250m
09.08.2020 04:40	10 min	250m
16.08.2020 23:50	20 min	250m
17.08.2020 00:10	10 min	140-250m
17.08.2020 00:20	10 min	250m
17.08.2020 00:30	10 min	120-250m
17.08.2020 00:40	10 min	60-250m
17.08.2020 00:50	10 min	250m
17.08.2020 01:00	10 min	80-250m
17.08.2020 01:10	10 min	60-250m
17.08.2020 01:20	30 min	80-250m
17.08.2020 02:20	10 min	160-250m
17.08.2020 02:30	10 min	180-250m
17.08.2020 17:10	20 min	30m 40m 60m 80m 100m 120m 140m 160m
17.08.2020 18:30	10 min	30m 60m 80m 120m
20.08.2020 23:40	10 min	250m
20.08.2020 23:50	10 min	200-250m
21.08.2020 00:00	10 min	120-250m
21.08.2020 00:10	10 min	100-250m
21.08.2020 00:20	20 min	120-250m
21.08.2020 00:40	10 min	180-250m
22.08.2020 01:10	10 min	Gill data missing
24.08.2020 06:30	10 min	250m
25.08.2020 22:10	10 min	250m
25.08.2020 22:50	10 min	250m
30.08.2020 02:30	10 min	250m
04.09.2020 13:30	10 min	Gill data missing
14.09.2020 09:50	30 min	250m
14.09.2020 10:20	10 min	200-250m
14.09.2020 16:50	10 min	250m
14.09.2020 17:00	10 min	200-250m
14.09.2020 17:10	10 min	180-250m
14.09.2020 17:20	50 min	160-250m

E.7 Deployment 7

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
23.07.2020 09:30	10 min	Gill data missing
06.08.2020 07:20	10 min	Gill data missing
06.08.2020 17:10	30 min	250m
06.08.2020 17:50	10 min	250m
06.08.2020 18:10	10 min	250m
06.08.2020 18:20	10 min	180-250m
06.08.2020 18:30	10 min	250m
06.08.2020 18:40	30 min	180-250m
06.08.2020 19:10	10 min	120m 140m 160m 180m
06.08.2020 19:20	10 min	120-250m
06.08.2020 19:30	10 min	140m 160m 180m 200m
08.08.2020 07:00	10 min	160m
08.08.2020 07:20	10 min	80m
09.08.2020 03:30	20 min	250m
09.08.2020 04:20	10 min	250m
09.08.2020 04:40	20 min	250m
16.08.2020 22:40	10 min	250m
16.08.2020 23:50	40 min	250m
17.08.2020 00:30	10 min	100-250m
17.08.2020 00:40	40 min	60-250m
17.08.2020 01:20	10 min	80-250m
17.08.2020 01:30	10 min	60-250m
17.08.2020 01:40	10 min	80-250m
17.08.2020 02:20	20 min	200-250m
17.08.2020 02:50	10 min	250m
17.08.2020 16:20	10 min	100m 180m 200m
17.08.2020 16:30	10 min	250m
17.08.2020 17:10	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m 200m
17.08.2020 17:20	10 min	30m 40m 60m 80m 100m 120m 160m
17.08.2020 17:50	10 min	60m
17.08.2020 18:30	10 min	30m
19.08.2020 10:40	10 min	Gill data missing
20.08.2020 23:40	10 min	200-250m
20.08.2020 23:50	10 min	140-250m
21.08.2020 00:00	10 min	100-250m
21.08.2020 00:10	10 min	80-250m
21.08.2020 00:20	20 min	120-250m
21.08.2020 00:40	10 min	140-250m
21.08.2020 00:50	10 min	100-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
21.08.2020 01:00	10 min	120-250m
21.08.2020 01:10	10 min	250m
24.08.2020 23:50	10 min	180m
25.08.2020 22:50	10 min	140-250m
27.08.2020 12:50	11 hours 20 min	all LiDAR data missing
30.08.2020 02:50	10 min	200m
02.09.2020 03:30	10 min	Gill data missing
08.09.2020 05:00	10 min	250m
14.09.2020 09:50	20 min	250m
14.09.2020 10:10	20 min	200-250m
14.09.2020 16:50	10 min	250m
14.09.2020 17:00	10 min	200-250m
14.09.2020 17:10	10 min	180-250m
14.09.2020 17:20	40 min	160-250m
14.09.2020 18:00	10 min	140-250m
14.09.2020 18:10	10 min	160-250m
14.09.2020 18:20	20 min	180-250m
14.09.2020 19:00	10 min	250m
15.09.2020 03:40	20 min	250m
15.09.2020 04:00	40 min	200-250m
15.09.2020 04:40	10 min	180-250m
15.09.2020 04:50	20 min	200-250m
15.09.2020 05:10	30 min	180-250m
15.09.2020 05:40	10 min	200-250m
15.09.2020 05:50	1 hours 00 min	180-250m
15.09.2020 06:50	10 min	200-250m
15.09.2020 07:00	10 min	250m
15.09.2020 16:20	10 min	Gill data missing
15.09.2020 21:40	20 min	250m
15.09.2020 22:50	20 min	250m
15.09.2020 23:20	10 min	80-250m
15.09.2020 23:30	40 min	60-250m
16.09.2020 00:10	1 hours 40 min	80-250m
16.09.2020 02:10	10 min	120-250m
29.09.2020 06:10	10 min	Gill data missing
05.10.2020 23:30	10 min	250m
13.10.2020 10:00	10 min	Gill data missing
16.10.2020 13:50	20 min	100m 120m
16.10.2020 14:50	10 min	80m 100m
17.10.2020 03:20	10 min	120m 160m 180m 200m
17.10.2020 03:40	20 min	180m 200m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.10.2020 04:00	10 min	250m
17.10.2020 05:10	10 min	160m
21.10.2020 04:40	10 min	180m
21.10.2020 04:50	10 min	80m 100m 140-250m
21.10.2020 05:00	20 min	80-250m
21.10.2020 05:50	10 min	180m
21.10.2020 06:10	10 min	80-250m
21.10.2020 06:20	8 hours 50 min	all LiDAR data missing
26.10.2020 14:30	10 min	160-250m
26.10.2020 15:40	10 min	Gill data missing
26.10.2020 17:50	10 min	120m 140m 160m 180m 200m
30.10.2020 22:50	10 min	120m
30.10.2020 23:00	10 min	100-250m
30.10.2020 23:10	10 min	200-250m
31.10.2020 01:00	10 min	120m 140m 160m
31.10.2020 01:10	10 min	60m 100m 120m 140m 160m
31.10.2020 01:20	10 min	250m
31.10.2020 01:30	10 min	80-250m
31.10.2020 01:40	10 min	60-250m
31.10.2020 01:50	10 min	100m 120m 160m 200m
31.10.2020 02:10	10 min	250m
31.10.2020 05:00	10 min	140m
31.10.2020 06:10	10 min	250m
31.10.2020 06:30	10 min	120-250m
31.10.2020 06:40	10 min	80-250m
31.10.2020 06:50	10 min	100-250m
06.11.2020 19:00	8 hours 30 min	all LiDAR data missing
09.11.2020 02:30	10 min	Gill data missing
10.11.2020 03:20	20 min	80-250m
10.11.2020 03:50	10 min	80-250m
10.11.2020 05:30	10 min	80m 120m 140m 160m 180m 200m
10.11.2020 05:50	10 min	80-250m
10.11.2020 06:00	10 min	120m 160m 180m 250m
10.11.2020 06:40	10 min	80m 100m 120m 140m 160m 180m 200m
10.11.2020 06:50	10 min	120m 160m 250m
10.11.2020 17:00	10 min	80-250m
10.11.2020 17:40	10 min	80m 100m 120m 140m 160m 180m 200m
10.11.2020 19:40	12 hours 50 min	80-250m
11.11.2020 08:30	10 min	60-250m
11.11.2020 08:40	2 hours 10 min	80-250m
11.11.2020 10:50	10 min	180m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.11.2020 11:00	10 min	120m 140m 160m 200-250m
11.11.2020 11:10	10 min	80-250m
11.11.2020 11:30	10 min	120m
11.11.2020 12:20	10 min	80-250m
11.11.2020 13:00	10 min	80m 100m 140m 160m 200-250m
11.11.2020 15:10	10 min	80-250m
11.11.2020 15:40	10 min	80m 100m 180m 200m
11.11.2020 15:50	10 min	80-250m
11.11.2020 16:10	10 min	140m 250m
11.11.2020 16:40	10 min	80-250m
11.11.2020 16:50	10 min	80m 200m
13.11.2020 03:40	10 min	80m
15.11.2020 15:00	10 min	250m
16.11.2020 15:50	10 min	Gill data missing
17.11.2020 20:50	9 hours 10 min	all LiDAR data missing
18.11.2020 06:00	10 min	180m 200m
20.11.2020 20:10	10 min	80m 120m 140m 160m
20.11.2020 21:00	10 min	100m 120m
21.11.2020 15:30	10 min	120m
21.11.2020 16:50	10 min	80m
21.11.2020 23:30	10 min	250m
23.11.2020 05:00	10 min	Gill data missing
24.11.2020 06:40	10 min	80m 140-250m
24.11.2020 07:00	10 min	80m
24.11.2020 08:30	10 min	80-250m
24.11.2020 10:10	10 min	160m 200-250m
24.11.2020 10:20	10 min	100m 140m 180m 200m
24.11.2020 10:30	20 min	80-250m
24.11.2020 13:00	10 min	250m
24.11.2020 13:50	10 min	80m 200m
24.11.2020 14:00	10 min	120-250m
24.11.2020 14:20	10 min	80m 140-250m
24.11.2020 14:40	20 min	80-250m
24.11.2020 15:20	10 min	180m 200m
24.11.2020 17:30	30 min	80-250m
24.11.2020 18:20	10 min	80-250m
25.11.2020 01:10	20 min	80m 100m 160m 250m
25.11.2020 01:40	10 min	100m
25.11.2020 01:50	10 min	80m 100m 120m 140m 250m
25.11.2020 02:10	10 min	200-250m
25.11.2020 03:00	10 min	80m 100m 140-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
25.11.2020 03:20	10 min	80m
25.11.2020 03:50	10 min	180m
25.11.2020 04:00	10 min	80m 100m 120m 140m 160m 180m 250m
25.11.2020 04:10	10 min	200m
25.11.2020 04:20	10 min	120m 160m 200m
25.11.2020 05:20	10 min	80m
25.11.2020 10:30	1 hours 00 min	80-250m
25.11.2020 11:30	10 min	80m 140m 160m 180m
25.11.2020 11:40	30 min	80-250m
25.11.2020 12:20	30 min	80-250m
25.11.2020 12:50	10 min	80m 100m 140m 180m
25.11.2020 13:00	10 min	140m 180m
25.11.2020 13:10	20 min	80-250m
25.11.2020 13:40	10 min	80m 100m 120m 180m 200m
25.11.2020 13:50	10 min	100m
25.11.2020 14:00	50 min	80-250m
25.11.2020 15:00	1 hours 00 min	80-250m
25.11.2020 16:10	10 min	80-250m
25.11.2020 17:10	10 min	80-250m
25.11.2020 17:50	10 min	80m 100m 200m
25.11.2020 18:00	30 min	80-250m
25.11.2020 18:40	10 min	180m 250m
25.11.2020 18:50	10 min	80-250m
25.11.2020 19:10	10 min	80m 200m
25.11.2020 19:20	1 hours 00 min	80-250m
25.11.2020 20:30	20 min	80-250m
25.11.2020 22:50	10 min	200m
25.11.2020 23:10	10 min	80m
25.11.2020 23:40	40 min	80-250m
26.11.2020 00:50	1 hours 50 min	80-250m
26.11.2020 02:50	10 min	80-250m
27.11.2020 00:20	10 min	160m
27.11.2020 01:10	10 min	180m
27.11.2020 16:50	10 min	80-250m
27.11.2020 17:10	20 min	80-250m
27.11.2020 17:30	10 min	80m 120m
27.11.2020 17:40	10 min	80-250m
27.11.2020 18:10	30 min	80-250m
27.11.2020 19:00	10 min	80-250m
27.11.2020 19:10	10 min	80m 100m 120m 140m 160m 180m 200m
27.11.2020 19:20	2 hours 50 min	80-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
27.11.2020 22:10	10 min	80m 100m 120m 160-250m
27.11.2020 22:20	1 hours 20 min	80-250m
27.11.2020 23:40	10 min	120m 160m 200m
27.11.2020 23:50	2 hours 00 min	80-250m
28.11.2020 01:50	10 min	180-250m
28.11.2020 02:00	10 min	160m 250m
28.11.2020 02:10	10 min	80-250m
28.11.2020 02:40	50 min	80-250m
28.11.2020 03:50	40 min	80-250m
28.11.2020 04:40	20 min	80-250m
28.11.2020 05:10	1 hours 10 min	80-250m
28.11.2020 06:30	10 min	80-250m
28.11.2020 06:50	10 min	80m 120m 160m 200-250m
28.11.2020 07:00	20 min	80-250m
28.11.2020 07:20	10 min	180m
28.11.2020 07:30	10 min	80-250m
28.11.2020 07:50	1 hours 10 min	80-250m
28.11.2020 09:10	30 min	80-250m
28.11.2020 09:50	10 min	80m 160m 180m 250m
28.11.2020 10:00	10 min	80-250m
28.11.2020 10:10	10 min	120-250m
28.11.2020 10:30	10 min	80-250m
28.11.2020 10:40	10 min	120m
28.11.2020 10:50	4 hours 30 min	80-250m
28.11.2020 15:30	20 min	80-250m
28.11.2020 15:50	10 min	160m
28.11.2020 16:00	10 min	80-250m
28.11.2020 16:30	10 min	120m
28.11.2020 16:40	10 min	80-250m
28.11.2020 17:00	40 min	80-250m
28.11.2020 17:40	10 min	80m 120m 160m
28.11.2020 17:50	20 min	80-250m
28.11.2020 18:10	10 min	80m
28.11.2020 18:50	1 hours 20 min	80-250m
28.11.2020 20:20	10 min	80-250m
28.11.2020 20:30	10 min	80m 120m 180m
28.11.2020 20:40	50 min	80-250m
28.11.2020 22:00	10 min	80-250m
28.11.2020 22:30	3 hours 40 min	80-250m
29.11.2020 02:20	2 hours 10 min	80-250m
29.11.2020 04:40	10 min	80-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
29.11.2020 05:00	20 min	80-250m
29.11.2020 05:30	30 min	80-250m
29.11.2020 06:10	10 min	80-250m
29.11.2020 06:30	10 min	80-250m
29.11.2020 06:50	10 min	80-250m
29.11.2020 07:20	1 hours 40 min	80-250m
29.11.2020 22:30	8 hours 20 min	all LiDAR data missing
30.11.2020 07:10	10 min	80m 120m 160m 180m
01.12.2020 01:00	7 hours 30 min	all LiDAR data missing
01.12.2020 08:30	10 min	30m 40m 60m 120m 140m
02.12.2020 03:40	7 hours 10 min	all LiDAR data missing
02.12.2020 10:50	10 min	30m 40m 80m 120m 180m
03.12.2020 03:10	7 hours 00 min	all LiDAR data missing
03.12.2020 15:40	10 min	200m
03.12.2020 15:50	10 min	80-250m
03.12.2020 22:40	10 min	80-250m
03.12.2020 22:50	6 hours 50 min	all LiDAR data missing
04.12.2020 05:40	20 min	80-250m
04.12.2020 06:00	10 min	80m 160m
04.12.2020 06:10	10 min	80-250m
04.12.2020 06:20	10 min	100m 200m
04.12.2020 06:30	10 min	80-250m
04.12.2020 06:50	10 min	80-250m
04.12.2020 07:00	10 min	80m 250m
04.12.2020 07:10	10 min	80-250m
04.12.2020 07:20	10 min	80m 160-250m
04.12.2020 07:30	50 min	80-250m
04.12.2020 08:30	10 min	80m
04.12.2020 08:40	10 min	80m 100m 120m 140m 160m 180m 200m
04.12.2020 09:30	10 min	80-250m
04.12.2020 09:40	10 min	80m 180m
05.12.2020 08:30	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
05.12.2020 08:40	10 min	all LiDAR data missing
05.12.2020 08:50	10 min	30m 40m 60m 100m 140m
05.12.2020 09:00	10 min	120m 140m 160m
05.12.2020 09:10	10 min	120m 140m
05.12.2020 16:30	20 min	80-250m
06.12.2020 08:10	10 min	Gill data missing
06.12.2020 17:10	10 min	140-250m
06.12.2020 17:40	20 min	80-250m
06.12.2020 19:00	10 min	80-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
06.12.2020 20:40	30 min	80-250m
06.12.2020 21:10	10 min	180m 250m
06.12.2020 21:20	1 hours 00 min	80-250m
06.12.2020 22:30	10 min	250m
06.12.2020 23:20	10 min	80-250m
06.12.2020 23:40	10 min	80-250m
07.12.2020 01:20	10 min	80-250m
07.12.2020 02:10	10 min	200-250m
07.12.2020 03:00	20 min	80-250m
07.12.2020 03:50	10 min	80-250m
07.12.2020 05:10	50 min	80-250m
07.12.2020 06:00	10 min	80m 100m 120m 160m 180m 250m
07.12.2020 06:30	20 min	80-250m
07.12.2020 06:50	10 min	160m 180m 200m
07.12.2020 07:00	10 min	80-250m
07.12.2020 07:20	10 min	80-250m
07.12.2020 07:30	10 min	160-250m
07.12.2020 07:40	10 min	200-250m
07.12.2020 08:10	10 min	80-250m
07.12.2020 08:20	10 min	160m 180m 200m
07.12.2020 08:40	10 min	80-250m
07.12.2020 08:50	10 min	200m
07.12.2020 09:00	20 min	80-250m
07.12.2020 09:30	10 min	80-250m
07.12.2020 09:40	7 hours 00 min	all LiDAR data missing
07.12.2020 22:50	10 min	80-250m
07.12.2020 23:00	10 min	80m 250m
07.12.2020 23:10	2 hours 30 min	80-250m
08.12.2020 02:00	40 min	80-250m
08.12.2020 02:40	10 min	120-250m
08.12.2020 03:00	10 min	80-250m
08.12.2020 03:10	10 min	100m
08.12.2020 03:20	40 min	80-250m
08.12.2020 05:20	10 min	80-250m
08.12.2020 05:40	10 min	80-250m
08.12.2020 06:00	10 min	80-250m
08.12.2020 06:50	2 hours 10 min	all LiDAR data missing
10.12.2020 12:20	14 hours 50 min	all LiDAR data missing
11.12.2020 04:00	10 min	200m
11.12.2020 04:30	10 min	80-250m
11.12.2020 11:00	10 min	80-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.12.2020 11:20	10 min	200m
11.12.2020 12:10	10 min	80m 120m 200m
11.12.2020 12:20	10 min	80-250m
11.12.2020 13:00	10 min	80-250m
11.12.2020 13:30	10 min	80-250m
11.12.2020 13:40	10 min	250m
11.12.2020 14:30	20 min	100m
11.12.2020 14:50	10 min	80m 100m 120m 160m 180m 200m
11.12.2020 15:10	10 min	80-250m
11.12.2020 16:50	10 min	140m
11.12.2020 17:20	10 min	80-250m
11.12.2020 17:40	10 min	200-250m
11.12.2020 18:10	10 min	100m 160-250m
11.12.2020 18:20	10 min	80-250m
11.12.2020 18:30	10 min	140m
11.12.2020 19:00	20 min	160m
11.12.2020 19:30	10 min	80m 100m 120m 160m
11.12.2020 20:10	10 min	140m 160m
11.12.2020 20:20	5 hours 50 min	all LiDAR data missing
12.12.2020 02:10	10 min	80-250m
12.12.2020 02:20	10 min	160-250m
12.12.2020 08:20	10 min	140m 160m 200m
12.12.2020 14:00	10 min	140m
12.12.2020 14:10	5 hours 50 min	all LiDAR data missing
13.12.2020 01:30	10 min	40m 60m 80m 100m 120m 250m
13.12.2020 01:40	10 min	100m 120m 180-250m
13.12.2020 01:50	10 min	80m 100m 140-250m
13.12.2020 02:00	10 min	160-250m
13.12.2020 02:10	10 min	60m 120m 160-250m
13.12.2020 03:10	10 min	120m 160m
13.12.2020 06:50	40 min	all LiDAR data missing
13.12.2020 12:00	10 min	180m
15.12.2020 10:50	10 min	160-250m
15.12.2020 11:00	10 min	180-250m
15.12.2020 11:40	10 min	200-250m
15.12.2020 17:10	50 min	80-250m
15.12.2020 18:00	10 min	120-250m
15.12.2020 18:10	10 min	100-250m
15.12.2020 18:20	40 min	80-250m
15.12.2020 19:00	20 min	100-250m
15.12.2020 19:20	10 min	180-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
15.12.2020 20:00	10 min	160m 250m
16.12.2020 04:00	1 hours 00 min	80-250m
16.12.2020 05:00	10 min	60-250m
16.12.2020 05:10	10 min	80-250m
16.12.2020 05:20	10 min	60-250m
16.12.2020 05:30	1 hours 20 min	80-250m
16.12.2020 06:50	20 min	100-250m
16.12.2020 07:10	10 min	80-250m
16.12.2020 07:20	10 min	120-250m
16.12.2020 07:30	20 min	140-250m
16.12.2020 07:50	10 min	100-250m
16.12.2020 08:10	10 min	80-250m
16.12.2020 08:50	10 min	140-250m
17.12.2020 08:30	10 min	200-250m
17.12.2020 08:40	10 min	120-250m
20.12.2020 03:20	10 min	Gill data missing
20.12.2020 05:00	10 min	30m
20.12.2020 05:10	3 hours 30 min	all LiDAR data missing
20.12.2020 08:40	10 min	30m 40m 60m 80m 160m 180m
21.12.2020 07:00	10 min	140m 180m 200m
21.12.2020 19:30	10 min	30m 60m 80m 100m 120m 140m 180m
21.12.2020 19:40	4 hours 50 min	all LiDAR data missing
22.12.2020 03:50	1 hours 20 min	80-250m
22.12.2020 05:10	10 min	120m 140m 180m 250m
22.12.2020 05:30	20 min	80-250m
22.12.2020 06:00	10 min	100m 160-250m
22.12.2020 06:10	10 min	100-250m
22.12.2020 06:20	10 min	80-250m
22.12.2020 06:40	1 hours 10 min	80-250m
22.12.2020 08:10	10 min	160m 200-250m
22.12.2020 08:20	10 min	80-250m
22.12.2020 09:00	20 min	80-250m
22.12.2020 09:30	20 min	80-250m
22.12.2020 09:50	10 min	80m 100m 120m 180-250m
22.12.2020 10:00	20 min	80-250m
23.12.2020 03:20	10 min	40m
23.12.2020 09:50	20 min	80-250m
23.12.2020 10:50	10 min	80-250m
23.12.2020 15:10	10 min	80m 250m
23.12.2020 15:20	10 min	80m 100m 120m 160m 250m
24.12.2020 02:00	10 min	80-250m

Table E.7: Gaps in the wind dataset of Deployment 7 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
26.12.2020 07:40	10 min	250m
26.12.2020 08:00	10 min	250m
26.12.2020 11:00	20 min	160m
26.12.2020 11:50	10 min	80-250m
26.12.2020 12:10	10 min	80m 100m 120m 140m 200-250m
26.12.2020 13:10	10 min	250m
27.12.2020 06:30	4 hours 20 min	all LiDAR data missing
28.12.2020 17:40	5 hours 50 min	all LiDAR data missing
29.12.2020 09:50	30 min	30m 40m 80m 140m
29.12.2020 10:40	10 min	100m 120m 160m
29.12.2020 11:00	10 min	30m 40m 100m 120m 160m
29.12.2020 11:10	10 min	40m 120m 160m 180m 250m
29.12.2020 11:20	1 hours 20 min	180m 200m
29.12.2020 12:40	10 min	30m 80m 120m
29.12.2020 12:50	20 min	30m 120m
29.12.2020 13:10	20 min	30m 40m 60m 100m 120m 140m 160m 180m 200m
29.12.2020 13:50	40 min	80m 100m

E.8 Deployment 8

Table E.8: Gaps in the wind dataset of Deployment 8 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
15.09.2020 03:00	10 min	250m
15.09.2020 03:30	20 min	250m
15.09.2020 03:50	10 min	200-250m
15.09.2020 04:00	10 min	180-250m
15.09.2020 04:10	20 min	200-250m
15.09.2020 04:30	30 min	180-250m
15.09.2020 05:00	10 min	250m
15.09.2020 05:10	10 min	180-250m
15.09.2020 05:20	10 min	200-250m
15.09.2020 05:30	10 min	180-250m
15.09.2020 05:40	10 min	200-250m
15.09.2020 05:50	50 min	180-250m
15.09.2020 06:40	10 min	160-250m
15.09.2020 06:50	20 min	200-250m
15.09.2020 07:30	10 min	Gill data missing
15.09.2020 15:10	10 min	Gill data missing
15.09.2020 21:30	40 min	250m
15.09.2020 23:20	10 min	100-250m
15.09.2020 23:30	1 hours 00 min	60-250m
16.09.2020 00:30	40 min	80-250m
16.09.2020 01:10	10 min	100-250m
16.09.2020 01:20	20 min	80-250m
16.09.2020 01:40	10 min	160-250m
29.09.2020 03:40	10 min	Gill data missing
09.10.2020 20:20	10 min	Gill data missing
13.10.2020 05:10	10 min	Gill data missing
17.10.2020 01:10	10 min	180-250m
17.10.2020 02:40	10 min	180m 250m
17.10.2020 02:50	10 min	200m
17.10.2020 03:50	10 min	200-250m
17.10.2020 04:00	20 min	250m
17.10.2020 04:40	20 min	250m
17.10.2020 12:50	10 min	200m
17.10.2020 17:00	10 min	250m
21.10.2020 15:40	10 min	250m

E.9 Deployment 9

Table E.9: Gaps in the wind dataset of Deployment 9 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
10.11.2020 20:10	10 min	250m
10.11.2020 20:20	20 min	160-250m
10.11.2020 20:40	10 min	180-250m
10.11.2020 20:50	10 min	160-250m
10.11.2020 21:00	20 min	120-250m
10.11.2020 21:20	20 min	80-250m
10.11.2020 21:40	10 min	100-250m
10.11.2020 21:50	1 hours 20 min	80-250m
10.11.2020 23:10	10 min	100-250m
10.11.2020 23:20	1 hours 10 min	80-250m
11.11.2020 00:30	50 min	100-250m
11.11.2020 01:20	20 min	120-250m
11.11.2020 01:40	10 min	100-250m
11.11.2020 01:50	10 min	160-250m
11.11.2020 02:30	10 min	120-250m
11.11.2020 02:40	10 min	140-250m
11.11.2020 02:50	20 min	120-250m
11.11.2020 03:10	10 min	180-250m
11.11.2020 03:30	10 min	180-250m
11.11.2020 03:40	10 min	160-250m
11.11.2020 04:10	20 min	160-250m
11.11.2020 04:30	10 min	140-250m
11.11.2020 04:40	10 min	120-250m
11.11.2020 04:50	40 min	100-250m
11.11.2020 05:30	20 min	250m
11.11.2020 06:00	10 min	120-250m
11.11.2020 06:30	30 min	120-250m
11.11.2020 07:00	20 min	100-250m
11.11.2020 07:20	30 min	120-250m
11.11.2020 07:50	20 min	100-250m
11.11.2020 08:10	20 min	80-250m
11.11.2020 08:30	10 min	60-250m
11.11.2020 08:40	40 min	80-250m
11.11.2020 09:20	10 min	100-250m
11.11.2020 09:30	10 min	80-250m
11.11.2020 09:40	10 min	100-250m
11.11.2020 09:50	10 min	140-250m
11.11.2020 10:00	10 min	160-250m
11.11.2020 10:10	10 min	140-250m

Table E.9: Gaps in the wind dataset of Deployment 9 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.11.2020 10:20	10 min	180-250m
11.11.2020 12:50	10 min	120m 200m
26.11.2020 06:00	10 min	Gill data missing
27.11.2020 04:10	20 min	250m
02.12.2020 03:20	10 min	250m
02.12.2020 21:00	10 min	250m
02.12.2020 21:50	10 min	80m 100m 160m 200-250m
05.12.2020 08:30	10 min	30m 40m
05.12.2020 08:40	10 min	30m 40m 60m 80m 100m 120m 140m
05.12.2020 08:50	10 min	30m 40m 60m
05.12.2020 09:30	10 min	250m
07.12.2020 09:10	10 min	140m 180-250m
07.12.2020 10:00	10 min	80-250m
07.12.2020 12:40	10 min	200m
07.12.2020 12:50	10 min	80m 100m 160m 200m
08.12.2020 00:40	10 min	80-250m
11.12.2020 13:00	10 min	Gill data missing
13.12.2020 00:40	10 min	200m
13.12.2020 05:20	10 min	250m
15.12.2020 10:50	10 min	160-250m
15.12.2020 11:00	10 min	180-250m
15.12.2020 11:10	10 min	250m
15.12.2020 11:30	10 min	180-250m
15.12.2020 11:40	10 min	250m
15.12.2020 17:10	2 hours 10 min	80-250m
15.12.2020 19:20	10 min	140m 200-250m
15.12.2020 19:40	10 min	200m
16.12.2020 04:00	50 min	80-250m
16.12.2020 04:50	20 min	60-250m
16.12.2020 05:10	10 min	80-250m
16.12.2020 05:20	20 min	60-250m
16.12.2020 05:40	1 hours 20 min	80-250m
16.12.2020 07:00	20 min	100-250m
16.12.2020 07:20	10 min	80-250m
16.12.2020 07:30	10 min	140-250m
16.12.2020 07:40	20 min	80-250m
16.12.2020 08:00	10 min	100m
16.12.2020 08:10	10 min	140m 160m 180m 250m
16.12.2020 08:30	10 min	250m
16.12.2020 08:40	10 min	80m 140m 180-250m
16.12.2020 08:50	10 min	160-250m

Table E.9: Gaps in the wind dataset of Deployment 9 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.12.2020 09:00	10 min	120m 250m
17.12.2020 08:40	10 min	120-250m
21.12.2020 10:00	10 min	140m
21.12.2020 22:10	10 min	250m
21.12.2020 22:20	30 min	180-250m
26.12.2020 20:30	10 min	Gill data missing
29.12.2020 13:10	10 min	30m 40m 60m 80m 100m 120m
29.12.2020 13:20	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m 200m
29.12.2020 13:30	10 min	140m 160m 200-250m
29.12.2020 14:20	10 min	30m 40m 60m 80m 100m
06.01.2021 22:00	10 min	80m 120m 160m
11.01.2021 02:00	10 min	Gill data missing
11.01.2021 02:50	10 min	120m 250m
11.01.2021 03:00	10 min	160m 200-250m
11.01.2021 03:10	10 min	250m
11.01.2021 03:20	20 min	80-250m
11.01.2021 03:40	10 min	80m 100m
11.01.2021 04:10	10 min	80-250m
11.01.2021 04:20	10 min	100m 120m 140m 160m 180m 250m
11.01.2021 04:40	10 min	80m 100m 140m 180-250m
11.01.2021 04:50	30 min	80-250m
11.01.2021 11:20	10 min	80m 140-250m
12.01.2021 00:50	10 min	80m 100m 120m 140m 160m 250m
15.01.2021 12:20	10 min	30m 40m 60m 80m 100m 120m
15.01.2021 19:20	20 min	100m
15.01.2021 20:40	10 min	250m
15.01.2021 21:40	10 min	140m
16.01.2021 15:00	10 min	120m 180m 250m
16.01.2021 15:20	10 min	180m
16.01.2021 15:30	10 min	80-250m
16.01.2021 15:40	10 min	80m 120m 140m
16.01.2021 15:50	20 min	80-250m
16.01.2021 16:20	10 min	80-250m
16.01.2021 16:30	10 min	120-250m
16.01.2021 16:40	10 min	40m 80-250m
16.01.2021 16:50	50 min	80-250m
16.01.2021 18:10	10 min	80-250m
16.01.2021 18:30	30 min	80-250m
16.01.2021 22:30	30 min	80-250m
16.01.2021 23:00	10 min	140m 180m
17.01.2021 00:00	20 min	100-250m

Table E.9: Gaps in the wind dataset of Deployment 9 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.01.2021 00:20	10 min	100m 120m 140m
17.01.2021 00:40	10 min	120m 140m 160m 200-250m
17.01.2021 00:50	20 min	80-250m
17.01.2021 04:50	10 min	80-250m
17.01.2021 16:30	10 min	Gill data missing
18.01.2021 06:50	10 min	80m 100m 120m 160m 200-250m
18.01.2021 07:10	10 min	80-250m
18.01.2021 07:30	10 min	80m 100m 140m 160m 200-250m
18.01.2021 08:20	10 min	80-250m
18.01.2021 11:40	10 min	80m 100m 140m
19.01.2021 00:50	10 min	100m 120m 200m
19.01.2021 01:50	10 min	80m 100m 120m 140m 160m 200-250m
19.01.2021 02:10	10 min	80-250m
19.01.2021 02:30	10 min	160m
19.01.2021 03:20	10 min	80-250m
19.01.2021 03:50	10 min	200m
19.01.2021 04:00	10 min	100m 120m 140m 160m 180m 250m
19.01.2021 04:10	10 min	140m 160m
19.01.2021 07:20	10 min	100m 160m
19.01.2021 08:00	30 min	80-250m
19.01.2021 08:30	10 min	100m 120m 140m
19.01.2021 09:10	10 min	180m
19.01.2021 09:50	20 min	80-250m
19.01.2021 10:30	10 min	80m 100m 120m 140m 160m 180m 250m
19.01.2021 10:40	10 min	80-250m
19.01.2021 11:10	20 min	80-250m
19.01.2021 11:30	20 min	100m
19.01.2021 11:50	10 min	80m 120m 160m 180m 250m
19.01.2021 12:00	20 min	80-250m
19.01.2021 12:40	30 min	80-250m
19.01.2021 13:10	10 min	100m 120m 140m 180m
19.01.2021 13:20	10 min	80-250m
19.01.2021 13:30	10 min	250m
19.01.2021 13:40	30 min	80-250m
19.01.2021 14:10	10 min	160m
19.01.2021 14:20	10 min	80m 100m 120m 160-250m
19.01.2021 14:30	10 min	80-250m
19.01.2021 15:40	10 min	200m
21.01.2021 02:50	10 min	250m
23.01.2021 11:00	10 min	200-250m
23.01.2021 11:20	30 min	80-250m

Table E.9: Gaps in the wind dataset of Deployment 9 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
23.01.2021 11:50	10 min	120m 180m 200m
23.01.2021 12:10	50 min	80-250m
23.01.2021 13:00	10 min	140-250m
23.01.2021 13:10	50 min	80-250m
23.01.2021 14:00	10 min	80m 120m 160m 180m
23.01.2021 14:10	30 min	80-250m
23.01.2021 15:40	10 min	180-250m
24.01.2021 06:00	10 min	40m 60m 100m 120m 140m
24.01.2021 06:10	10 min	40m 60m 80m 100m 120m 160m 180m 250m
24.01.2021 19:10	10 min	180m

E.10 Deployment 10

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
16.01.2021 12:00	10 min	Gill data missing
16.01.2021 15:30	20 min	80-250m
16.01.2021 15:50	10 min	120m
16.01.2021 16:10	10 min	80m 120m 140m 180m
16.01.2021 16:20	10 min	80m 160m 200m
16.01.2021 16:30	10 min	80-250m
16.01.2021 16:40	10 min	40m 80-250m
16.01.2021 16:50	10 min	30m 40m 80-250m
16.01.2021 17:00	30 min	30m 40m
16.01.2021 17:30	10 min	30m 40m 80-250m
16.01.2021 17:40	10 min	30m 80m 100m
16.01.2021 18:00	10 min	80-250m
16.01.2021 18:40	10 min	30m 80-250m
16.01.2021 18:50	10 min	80-250m
20.01.2021 22:30	10 min	250m
21.01.2021 02:50	10 min	250m
24.01.2021 06:20	10 min	all LiDAR data missing
29.01.2021 09:00	10 min	80m 100m 120m 140m 180-250m
29.01.2021 09:10	20 min	80-250m
29.01.2021 09:40	10 min	80-250m
29.01.2021 10:00	10 min	80-250m
29.01.2021 10:20	10 min	180m
29.01.2021 10:30	10 min	80-250m
29.01.2021 11:10	20 min	80-250m
29.01.2021 11:50	20 min	80-250m
29.01.2021 12:20	10 min	250m
29.01.2021 12:40	30 min	80-250m
29.01.2021 16:30	10 min	80-250m
29.01.2021 17:00	10 min	200-250m
30.01.2021 06:20	10 min	Gill data missing
30.01.2021 21:50	10 min	160m
31.01.2021 08:10	10 min	160m 180m 200m
02.02.2021 15:40	30 min	80-250m
02.02.2021 22:30	10 min	80-250m
02.02.2021 22:40	10 min	140m
04.02.2021 20:30	10 min	120m
05.02.2021 12:00	10 min	180m
06.02.2021 02:00	20 min	30m 40m
06.02.2021 02:30	10 min	250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
06.02.2021 02:50	10 min	180m 250m
06.02.2021 03:00	10 min	80-250m
06.02.2021 09:50	10 min	100m 140m 160m 180m
06.02.2021 10:00	10 min	80-250m
07.02.2021 22:50	10 min	80m 100m 120m 140m 180m
08.02.2021 05:10	10 min	200m
09.02.2021 14:10	10 min	30m 40m
09.02.2021 19:20	10 min	30m 40m
09.02.2021 20:00	10 min	30m 40m
09.02.2021 22:00	10 min	40m
09.02.2021 22:50	20 min	30m
10.02.2021 00:10	10 min	30m 80m 120m 160m
10.02.2021 03:10	10 min	80-250m
10.02.2021 03:20	10 min	30m 40m
10.02.2021 04:10	10 min	40m
10.02.2021 07:50	10 min	30m 40m
10.02.2021 09:40	20 min	30m 40m
10.02.2021 10:00	10 min	40m
10.02.2021 13:30	20 min	40m 160m
11.02.2021 09:30	10 min	40m
11.02.2021 10:10	30 min	40m 80m 140m 180m
11.02.2021 20:40	10 min	30m
12.02.2021 02:30	20 min	80-250m
12.02.2021 02:50	10 min	30m 40m
12.02.2021 03:00	10 min	30m
12.02.2021 03:20	10 min	30m
12.02.2021 04:20	40 min	30m 40m
12.02.2021 05:00	10 min	30m
12.02.2021 05:10	30 min	30m 40m
12.02.2021 05:50	10 min	40m
12.02.2021 15:40	10 min	Gill data missing
15.02.2021 15:20	10 min	180-250m
15.02.2021 15:30	40 min	140-250m
15.02.2021 16:10	10 min	120-250m
15.02.2021 16:20	1 hours 30 min	100-250m
15.02.2021 17:50	1 hours 30 min	80-250m
15.02.2021 19:20	30 min	100-250m
15.02.2021 19:50	10 min	160-250m
15.02.2021 20:00	10 min	140-250m
15.02.2021 20:10	10 min	100-250m
15.02.2021 20:20	10 min	250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
15.02.2021 20:30	20 min	140-250m
15.02.2021 20:50	10 min	120-250m
15.02.2021 21:00	10 min	140-250m
15.02.2021 21:10	10 min	120-250m
15.02.2021 21:20	10 min	100-250m
15.02.2021 21:30	10 min	120-250m
15.02.2021 21:40	40 min	100-250m
15.02.2021 22:20	10 min	120-250m
15.02.2021 22:30	40 min	140-250m
15.02.2021 23:10	10 min	160-250m
15.02.2021 23:20	10 min	180-250m
15.02.2021 23:30	10 min	120-250m
15.02.2021 23:40	20 min	100-250m
16.02.2021 00:00	20 min	120-250m
16.02.2021 00:20	10 min	140-250m
16.02.2021 00:30	20 min	100-250m
16.02.2021 00:50	1 hours 40 min	80-250m
16.02.2021 02:30	20 min	60-250m
16.02.2021 02:50	50 min	80-250m
16.02.2021 03:40	30 min	100-250m
16.02.2021 04:10	20 min	80-250m
16.02.2021 04:30	20 min	60-250m
16.02.2021 04:50	30 min	80-250m
16.02.2021 05:20	20 min	100-250m
16.02.2021 05:40	20 min	80-250m
16.02.2021 06:00	10 min	120-250m
16.02.2021 06:10	10 min	180-250m
16.02.2021 06:20	10 min	200-250m
16.02.2021 08:40	10 min	200-250m
16.02.2021 08:50	10 min	120-250m
16.02.2021 09:00	10 min	160-250m
16.02.2021 20:40	10 min	200-250m
16.02.2021 20:50	10 min	180-250m
16.02.2021 21:00	10 min	100-250m
16.02.2021 21:10	10 min	120-250m
16.02.2021 21:20	10 min	180-250m
17.02.2021 07:40	10 min	250m
17.02.2021 09:20	10 min	250m
17.02.2021 10:10	10 min	160-250m
17.02.2021 10:20	1 hours 20 min	80-250m
17.02.2021 11:40	10 min	100-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.02.2021 11:50	10 min	120-250m
17.02.2021 12:00	10 min	160-250m
18.02.2021 17:20	10 min	250m
18.02.2021 17:30	10 min	140m 160m 180m 200m
18.02.2021 17:40	10 min	140m 160m
18.02.2021 19:40	10 min	200-250m
18.02.2021 19:50	10 min	140-250m
18.02.2021 20:00	10 min	160m 180m 200m
18.02.2021 20:10	10 min	160m 180m
19.02.2021 09:10	10 min	200-250m
19.02.2021 09:20	20 min	250m
19.02.2021 09:40	10 min	140-250m
19.02.2021 09:50	20 min	100-250m
23.02.2021 00:10	10 min	140-250m
23.02.2021 11:50	10 min	120m 200-250m
23.02.2021 12:00	10 min	80-250m
25.02.2021 11:20	20 min	200-250m
25.02.2021 11:40	10 min	250m
26.02.2021 14:00	10 min	Gill data missing
26.02.2021 16:20	10 min	250m
26.02.2021 17:20	30 min	250m
26.02.2021 18:00	10 min	250m
26.02.2021 18:10	10 min	200-250m
26.02.2021 18:20	30 min	250m
26.02.2021 22:10	30 min	250m
26.02.2021 23:00	1 hours 10 min	250m
27.02.2021 00:30	2 hours 00 min	250m
27.02.2021 02:30	20 min	200-250m
27.02.2021 02:50	10 min	180-250m
27.02.2021 03:00	10 min	200-250m
27.02.2021 03:10	30 min	180-250m
27.02.2021 03:40	40 min	160-250m
27.02.2021 04:20	1 hours 20 min	140-250m
27.02.2021 05:40	10 min	160-250m
27.02.2021 05:50	10 min	200-250m
27.02.2021 06:00	10 min	180-250m
27.02.2021 06:10	10 min	160-250m
27.02.2021 06:20	30 min	180-250m
27.02.2021 06:50	10 min	200-250m
27.02.2021 07:00	20 min	250m
27.02.2021 20:00	30 min	250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
27.02.2021 20:30	10 min	200-250m
27.02.2021 20:40	1 hours 30 min	140-250m
27.02.2021 22:10	10 min	180-250m
27.02.2021 22:20	10 min	160-250m
27.02.2021 22:30	20 min	200-250m
27.02.2021 22:50	20 min	250m
27.02.2021 23:10	40 min	200-250m
27.02.2021 23:50	10 min	180-250m
28.02.2021 00:00	10 min	160-250m
28.02.2021 00:10	10 min	140-250m
28.02.2021 00:20	20 min	120-250m
28.02.2021 00:40	30 min	100-250m
28.02.2021 01:10	40 min	80-250m
28.02.2021 01:50	50 min	60-250m
28.02.2021 02:40	30 min	80-250m
28.02.2021 03:10	1 hours 10 min	60-250m
28.02.2021 04:20	20 min	80-250m
28.02.2021 04:40	10 min	60-250m
28.02.2021 04:50	30 min	80-250m
28.02.2021 05:20	40 min	60-250m
28.02.2021 06:00	30 min	80-250m
28.02.2021 06:30	10 min	60-250m
28.02.2021 06:40	20 min	80-250m
28.02.2021 07:00	20 min	60-250m
28.02.2021 07:20	10 min	80-250m
28.02.2021 07:30	10 min	60-250m
28.02.2021 07:40	50 min	80-250m
28.02.2021 08:30	40 min	60-250m
28.02.2021 09:10	10 min	80-250m
28.02.2021 09:20	10 min	60-250m
28.02.2021 09:30	3 hours 50 min	80-250m
28.02.2021 13:20	10 min	60-250m
28.02.2021 13:30	1 hours 00 min	80-250m
28.02.2021 14:30	10 min	30m 60-250m
28.02.2021 14:40	20 min	80-250m
28.02.2021 15:00	10 min	100-250m
28.02.2021 15:10	2 hours 30 min	80-250m
28.02.2021 17:40	30 min	60-250m
28.02.2021 18:10	10 min	80-250m
28.02.2021 18:20	10 min	60-250m
28.02.2021 18:30	10 min	80-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
28.02.2021 18:40	10 min	60-250m
28.02.2021 18:50	20 min	80-250m
28.02.2021 19:10	20 min	60-250m
28.02.2021 19:30	10 min	80-250m
28.02.2021 19:40	20 min	60-250m
28.02.2021 20:00	1 hours 30 min	80-250m
28.02.2021 21:30	10 min	60-250m
28.02.2021 21:40	10 min	80-250m
28.02.2021 21:50	10 min	60-250m
28.02.2021 22:00	50 min	80-250m
28.02.2021 22:50	10 min	60-250m
28.02.2021 23:00	1 hours 20 min	80-250m
01.03.2021 00:20	10 min	60-250m
01.03.2021 00:30	11 hours 30 min	80-250m
01.03.2021 12:00	10 min	100-250m
01.03.2021 12:10	11 hours 30 min	80-250m
01.03.2021 23:40	10 min	60-250m
01.03.2021 23:50	7 hours 50 min	80-250m
02.03.2021 07:40	10 min	60-250m
02.03.2021 07:50	50 min	80-250m
02.03.2021 08:40	20 min	100-250m
02.03.2021 09:00	30 min	80-250m
02.03.2021 11:30	10 min	120-250m
02.03.2021 11:40	20 min	100-250m
02.03.2021 12:00	10 min	120-250m
02.03.2021 12:10	30 min	80-250m
02.03.2021 12:40	10 min	120-250m
02.03.2021 13:20	30 min	100-250m
02.03.2021 13:50	1 hours 30 min	80-250m
02.03.2021 15:20	10 min	60-250m
02.03.2021 15:30	10 min	80-250m
02.03.2021 15:40	20 min	60-250m
02.03.2021 16:00	10 min	80-250m
02.03.2021 16:10	40 min	60-250m
02.03.2021 16:50	10 min	80-250m
02.03.2021 17:00	20 min	60-250m
02.03.2021 17:20	2 hours 00 min	80-250m
02.03.2021 20:50	20 min	60-250m
02.03.2021 21:10	10 min	80-250m
02.03.2021 21:20	1 hours 10 min	60-250m
02.03.2021 22:30	10 min	120-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
03.03.2021 06:40	3 hours 50 min	60-250m
03.03.2021 10:30	40 min	80-250m
03.03.2021 11:10	10 min	60-250m
03.03.2021 11:20	1 hours 20 min	80-250m
03.03.2021 12:40	10 min	100-250m
03.03.2021 12:50	10 min	80-250m
03.03.2021 13:00	50 min	100-250m
03.03.2021 13:50	20 min	120-250m
03.03.2021 14:10	10 min	250m
09.03.2021 00:10	10 min	180-250m
09.03.2021 00:20	10 min	140-250m
09.03.2021 00:30	10 min	120-250m
09.03.2021 00:40	30 min	140-250m
09.03.2021 01:10	20 min	160-250m
09.03.2021 01:30	20 min	140-250m
09.03.2021 01:50	20 min	120-250m
09.03.2021 02:10	10 min	140-250m
09.03.2021 02:20	10 min	60m 100-250m
09.03.2021 02:30	10 min	60-250m
09.03.2021 02:40	10 min	100-250m
09.03.2021 02:50	20 min	60-250m
09.03.2021 03:10	20 min	80-250m
09.03.2021 03:30	10 min	60-250m
09.03.2021 03:40	50 min	80-250m
09.03.2021 04:30	10 min	100-250m
09.03.2021 04:40	10 min	80-250m
09.03.2021 04:50	30 min	100-250m
09.03.2021 05:20	20 min	140-250m
09.03.2021 05:40	10 min	160-250m
09.03.2021 05:50	10 min	120-250m
09.03.2021 07:50	10 min	180m
10.03.2021 07:50	10 min	Gill data missing
16.03.2021 14:20	10 min	250m
16.03.2021 20:00	10 min	100m 120m 140m 200m
20.03.2021 11:10	10 min	180-250m
20.03.2021 11:20	10 min	160-250m
20.03.2021 12:30	10 min	140m 160m
20.03.2021 12:40	10 min	80-250m
20.03.2021 19:00	10 min	140-250m
20.03.2021 19:10	10 min	100-250m
20.03.2021 19:20	10 min	140-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.03.2021 22:30	10 min	160-250m
20.03.2021 22:40	10 min	100-250m
20.03.2021 22:50	10 min	80-250m
20.03.2021 23:00	20 min	100-250m
23.03.2021 22:10	10 min	Gill data missing
24.03.2021 21:50	20 min	250m
25.03.2021 06:20	40 min	250m
25.03.2021 07:00	20 min	160-250m
25.03.2021 07:20	10 min	140-250m
25.03.2021 07:30	10 min	120-250m
25.03.2021 07:40	20 min	140-250m
25.03.2021 08:00	30 min	160-250m
25.03.2021 08:30	10 min	200-250m
25.03.2021 08:40	10 min	140-250m
25.03.2021 08:50	30 min	160-250m
25.03.2021 09:20	10 min	180-250m
25.03.2021 09:30	10 min	250m
25.03.2021 09:40	30 min	160-250m
25.03.2021 10:10	10 min	180-250m
25.03.2021 10:30	10 min	250m
25.03.2021 10:40	10 min	140-250m
25.03.2021 10:50	50 min	120-250m
25.03.2021 11:40	10 min	100-250m
25.03.2021 11:50	10 min	80-250m
25.03.2021 12:00	10 min	180-250m
25.03.2021 12:10	1 hours 00 min	250m
25.03.2021 15:40	20 min	200-250m
25.03.2021 16:00	20 min	250m
25.03.2021 16:30	10 min	250m
25.03.2021 16:40	10 min	200-250m
25.03.2021 16:50	10 min	250m
25.03.2021 17:00	10 min	200-250m
25.03.2021 17:10	10 min	180-250m
25.03.2021 17:20	10 min	200-250m
25.03.2021 17:30	20 min	180-250m
26.03.2021 21:40	10 min	250m
29.03.2021 19:10	3 hours 20 min	250m
29.03.2021 22:40	10 min	250m
30.03.2021 03:00	40 min	250m
01.04.2021 01:30	10 min	80-250m
01.04.2021 01:40	10 min	100-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
05.04.2021 15:30	10 min	40m
05.04.2021 21:50	10 min	30m 40m
06.04.2021 12:30	10 min	30m 40m
06.04.2021 17:30	10 min	30m 40m
06.04.2021 21:00	10 min	Gill data missing
07.04.2021 15:40	10 min	40m
19.04.2021 11:40	1 hours 10 min	250m
19.04.2021 12:50	10 min	200-250m
19.04.2021 13:00	20 min	180-250m
19.04.2021 13:20	30 min	200-250m
19.04.2021 13:50	20 min	160-250m
19.04.2021 14:10	10 min	140-250m
19.04.2021 14:20	10 min	120-250m
19.04.2021 14:30	50 min	140-250m
19.04.2021 15:20	20 min	120-250m
19.04.2021 15:40	10 min	140-250m
19.04.2021 15:50	10 min	120-250m
19.04.2021 16:00	30 min	100-250m
19.04.2021 16:30	30 min	140-250m
19.04.2021 17:00	10 min	120-250m
19.04.2021 17:10	10 min	140-250m
19.04.2021 17:20	20 min	160-250m
19.04.2021 17:40	10 min	180m 200m
19.04.2021 17:50	10 min	140-250m
19.04.2021 18:00	1 hours 50 min	60-250m
20.04.2021 13:30	10 min	250m
20.04.2021 14:30	10 min	Gill data missing
20.04.2021 17:30	10 min	250m
24.04.2021 04:10	10 min	Gill data missing
01.05.2021 06:30	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m 200m
01.05.2021 06:40	10 min	30m 40m 60m 80m 100m 120m 140m 160m 180m
01.05.2021 06:50	10 min	all LiDAR data missing
01.05.2021 07:00	10 min	30m 40m 60m 80m 100m 120m 160m 180m
04.05.2021 04:00	10 min	Gill data missing
06.05.2021 21:10	10 min	100m
06.05.2021 21:30	10 min	100m 140-250m
06.05.2021 21:50	10 min	250m
09.05.2021 12:20	10 min	200-250m
09.05.2021 12:30	10 min	100-250m
09.05.2021 12:40	10 min	180-250m
09.05.2021 14:10	20 min	250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
09.05.2021 22:20	10 min	160-250m
10.05.2021 00:50	10 min	140-250m
10.05.2021 01:00	10 min	120-250m
10.05.2021 01:10	10 min	80-250m
10.05.2021 01:20	10 min	140m 160m 180m 250m
10.05.2021 01:30	10 min	100-250m
10.05.2021 01:40	10 min	80-250m
10.05.2021 02:00	10 min	160m 200-250m
10.05.2021 02:10	10 min	140-250m
10.05.2021 03:20	10 min	120-250m
10.05.2021 03:30	10 min	80-250m
10.05.2021 03:40	10 min	140-250m
10.05.2021 03:50	10 min	160-250m
10.05.2021 10:20	20 min	160-250m
10.05.2021 10:40	10 min	120-250m
10.05.2021 10:50	10 min	100-250m
10.05.2021 11:00	10 min	140-250m
10.05.2021 11:20	10 min	140m 160m 180m 200m
11.05.2021 12:50	10 min	250m
11.05.2021 13:00	10 min	200-250m
11.05.2021 23:20	10 min	120-250m
11.05.2021 23:30	10 min	100-250m
11.05.2021 23:40	10 min	80-250m
11.05.2021 23:50	10 min	80m 100m 120m 160-250m
12.05.2021 00:20	10 min	160-250m
12.05.2021 00:30	20 min	120-250m
12.05.2021 00:50	40 min	100-250m
12.05.2021 01:30	10 min	80-250m
12.05.2021 01:40	10 min	100-250m
12.05.2021 01:50	10 min	80-250m
12.05.2021 02:00	30 min	60-250m
12.05.2021 02:30	10 min	60m 80m 100m 120m 140m 160m 180m 200m
12.05.2021 02:50	10 min	60m 80m 100m 120m 140m
12.05.2021 03:00	10 min	60-250m
12.05.2021 03:10	10 min	120m 140m
12.05.2021 04:00	10 min	80m 100m 140-250m
12.05.2021 06:30	10 min	200-250m
12.05.2021 06:40	10 min	250m
12.05.2021 07:10	10 min	120-250m
12.05.2021 07:20	50 min	60-250m
12.05.2021 17:20	40 min	250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
12.05.2021 18:00	20 min	200-250m
12.05.2021 18:20	30 min	180-250m
12.05.2021 18:50	10 min	160-250m
12.05.2021 19:00	10 min	140-250m
12.05.2021 19:10	40 min	160-250m
12.05.2021 19:50	10 min	180-250m
12.05.2021 20:00	20 min	160-250m
12.05.2021 20:20	20 min	200-250m
12.05.2021 20:40	20 min	160-250m
12.05.2021 21:00	20 min	140-250m
12.05.2021 21:20	10 min	160-250m
12.05.2021 21:30	10 min	140-250m
12.05.2021 21:40	10 min	180-250m
12.05.2021 22:00	10 min	200-250m
12.05.2021 22:20	10 min	180-250m
12.05.2021 22:30	10 min	250m
12.05.2021 22:40	10 min	140-250m
12.05.2021 22:50	10 min	120-250m
12.05.2021 23:00	10 min	160-250m
12.05.2021 23:10	10 min	100-250m
12.05.2021 23:20	10 min	180-250m
12.05.2021 23:30	10 min	140m 160m 200-250m
12.05.2021 23:40	10 min	180-250m
12.05.2021 23:50	10 min	100-250m
13.05.2021 00:00	10 min	200-250m
13.05.2021 00:10	10 min	100-250m
13.05.2021 00:20	10 min	80-250m
13.05.2021 00:30	10 min	100-250m
13.05.2021 00:40	10 min	80-250m
13.05.2021 00:50	10 min	100-250m
13.05.2021 01:00	10 min	80-250m
13.05.2021 01:10	20 min	60-250m
13.05.2021 01:30	20 min	80-250m
13.05.2021 02:00	30 min	60-250m
13.05.2021 02:30	10 min	80-250m
13.05.2021 02:40	1 hours 20 min	60-250m
13.05.2021 04:00	20 min	100-250m
13.05.2021 04:20	10 min	160-250m
13.05.2021 04:30	10 min	180-250m
13.05.2021 04:40	40 min	60-250m
13.05.2021 05:20	10 min	80-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
13.05.2021 05:30	10 min	60-250m
13.05.2021 05:40	30 min	80-250m
13.05.2021 06:10	10 min	60-250m
13.05.2021 06:20	50 min	80-250m
13.05.2021 07:10	10 min	100-250m
13.05.2021 07:20	20 min	80-250m
13.05.2021 07:40	20 min	120-250m
13.05.2021 18:50	20 min	30m 80-250m
13.05.2021 19:10	10 min	80-250m
15.05.2021 06:50	10 min	120m 140m
15.05.2021 07:10	20 min	100m
16.05.2021 02:50	10 min	Gill data missing
16.05.2021 06:30	10 min	250m
16.05.2021 20:50	10 min	250m
17.05.2021 07:30	10 min	250m
17.05.2021 09:40	10 min	250m
19.05.2021 01:00	10 min	250m
24.05.2021 19:40	20 min	250m
24.05.2021 23:50	10 min	140m
25.05.2021 00:10	10 min	60-250m
25.05.2021 00:20	10 min	40-250m
25.05.2021 00:30	10 min	40m 60m 80m 100m 120m 140m 160m 180m 200m
28.05.2021 02:30	20 min	250m
28.05.2021 03:00	10 min	250m
28.05.2021 04:50	10 min	80-250m
28.05.2021 05:30	20 min	30m 80-250m
28.05.2021 05:50	10 min	80-250m
29.05.2021 17:00	10 min	Gill data missing
31.05.2021 12:30	10 min	200-250m
31.05.2021 12:40	10 min	140-250m
31.05.2021 12:50	20 min	120-250m
31.05.2021 13:10	10 min	100-250m
31.05.2021 15:30	20 min	250m
31.05.2021 15:50	10 min	200-250m
31.05.2021 16:00	20 min	250m
31.05.2021 16:20	30 min	200-250m
31.05.2021 16:50	10 min	180-250m
31.05.2021 17:00	10 min	200-250m
31.05.2021 17:10	10 min	180-250m
31.05.2021 17:20	10 min	160-250m
31.05.2021 17:30	30 min	140-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
31.05.2021 18:00	10 min	60-250m
31.05.2021 18:10	10 min	140m 200-250m
31.05.2021 18:40	10 min	60-250m
31.05.2021 18:50	10 min	100-250m
31.05.2021 19:00	10 min	60-250m
31.05.2021 19:40	10 min	80-250m
02.06.2021 04:20	10 min	250m
02.06.2021 04:30	10 min	180-250m
02.06.2021 05:00	10 min	160-250m
02.06.2021 05:10	20 min	180-250m
02.06.2021 05:30	10 min	250m
02.06.2021 05:50	10 min	250m
03.06.2021 03:50	10 min	180m
03.06.2021 11:10	10 min	250m
03.06.2021 11:20	20 min	180-250m
03.06.2021 11:40	10 min	250m
04.06.2021 02:10	10 min	140-250m
04.06.2021 02:20	10 min	80-250m
04.06.2021 02:30	2 hours 50 min	60-250m
04.06.2021 05:20	10 min	80-250m
04.06.2021 05:30	10 min	60-250m
04.06.2021 05:40	2 hours 30 min	80-250m
04.06.2021 08:10	30 min	100-250m
04.06.2021 08:40	20 min	80-250m
04.06.2021 09:00	10 min	100-250m
04.06.2021 09:10	10 min	80-250m
04.06.2021 09:20	40 min	100-250m
04.06.2021 10:00	30 min	80-250m
04.06.2021 10:30	50 min	100-250m
04.06.2021 11:20	30 min	120-250m
04.06.2021 11:50	50 min	100-250m
04.06.2021 12:40	10 min	80-250m
04.06.2021 12:50	10 min	120-250m
04.06.2021 13:00	10 min	140-250m
04.06.2021 13:10	10 min	200-250m
04.06.2021 13:20	10 min	160-250m
04.06.2021 13:30	10 min	180-250m
04.06.2021 13:50	10 min	100-250m
04.06.2021 14:00	10 min	140-250m
04.06.2021 14:50	10 min	200-250m
04.06.2021 15:00	10 min	140-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.06.2021 15:10	20 min	80-250m
04.06.2021 15:30	10 min	60-250m
04.06.2021 15:40	10 min	80-250m
04.06.2021 15:50	20 min	100-250m
04.06.2021 16:10	20 min	80-250m
04.06.2021 16:30	30 min	100-250m
04.06.2021 17:20	10 min	100m 120m 140m 250m
04.06.2021 17:30	10 min	80-250m
04.06.2021 19:00	10 min	250m
04.06.2021 19:10	10 min	120-250m
04.06.2021 19:20	2 hours 50 min	80-250m
04.06.2021 22:10	10 min	100-250m
04.06.2021 22:20	10 min	80-250m
04.06.2021 22:30	10 min	100-250m
04.06.2021 22:40	1 hours 30 min	80-250m
05.06.2021 00:10	1 hours 10 min	60-250m
05.06.2021 01:20	40 min	80-250m
05.06.2021 02:00	20 min	60-250m
05.06.2021 02:20	30 min	80-250m
05.06.2021 02:50	1 hours 30 min	60-250m
05.06.2021 04:20	40 min	80-250m
05.06.2021 05:00	20 min	60-250m
05.06.2021 05:20	30 min	80-250m
05.06.2021 05:50	10 min	140-250m
05.06.2021 11:40	20 min	120-250m
05.06.2021 12:00	10 min	140-250m
05.06.2021 12:10	10 min	120-250m
05.06.2021 12:20	10 min	140-250m
06.06.2021 00:20	10 min	160-250m
06.06.2021 00:30	10 min	100-250m
07.06.2021 05:50	10 min	100-250m
07.06.2021 06:00	10 min	80-250m
07.06.2021 06:10	10 min	60-250m
07.06.2021 06:20	10 min	140-250m
07.06.2021 06:40	20 min	250m
07.06.2021 18:50	10 min	250m
07.06.2021 19:10	10 min	250m
07.06.2021 19:30	10 min	160-250m
07.06.2021 19:40	30 min	120-250m
07.06.2021 20:10	20 min	140-250m
07.06.2021 20:30	20 min	100-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
07.06.2021 20:50	1 hours 10 min	80-250m
07.06.2021 22:00	50 min	60-250m
07.06.2021 22:50	1 hours 40 min	80-250m
08.06.2021 00:30	10 min	100-250m
08.06.2021 00:40	1 hours 10 min	80-250m
08.06.2021 01:50	10 min	100-250m
08.06.2021 02:00	20 min	80-250m
08.06.2021 02:20	1 hours 00 min	100-250m
08.06.2021 03:20	3 hours 30 min	80-250m
08.06.2021 06:50	20 min	120-250m
08.06.2021 07:10	10 min	100-250m
08.06.2021 07:20	20 min	120-250m
08.06.2021 07:40	40 min	100-250m
08.06.2021 08:20	20 min	120-250m
08.06.2021 08:40	50 min	100-250m
08.06.2021 09:30	10 min	120-250m
08.06.2021 09:40	10 min	160-250m
08.06.2021 09:50	10 min	120-250m
08.06.2021 10:00	20 min	140-250m
08.06.2021 10:20	10 min	160-250m
08.06.2021 10:30	10 min	200-250m
08.06.2021 10:40	10 min	160-250m
08.06.2021 10:50	20 min	120-250m
08.06.2021 11:10	10 min	180-250m
08.06.2021 11:20	20 min	250m
08.06.2021 15:10	10 min	140m
08.06.2021 15:30	10 min	250m
09.06.2021 00:00	20 min	30m
11.06.2021 11:50	10 min	250m
11.06.2021 13:50	10 min	Gill data missing
11.06.2021 14:10	2 hours 10 min	80-250m
11.06.2021 16:20	30 min	100-250m
11.06.2021 16:50	1 hours 50 min	80-250m
11.06.2021 18:40	10 min	100-250m
11.06.2021 18:50	10 min	80-250m
11.06.2021 19:00	30 min	100-250m
11.06.2021 19:30	10 min	140-250m
11.06.2021 19:50	10 min	250m
11.06.2021 20:00	20 min	140m 160m 180m 200m
17.06.2021 21:00	20 min	80-250m
17.06.2021 21:20	1 hours 50 min	60-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
17.06.2021 23:10	20 min	80-250m
17.06.2021 23:30	20 min	60-250m
17.06.2021 23:50	1 hours 00 min	80-250m
18.06.2021 00:50	10 min	120-250m
18.06.2021 01:00	10 min	100-250m
18.06.2021 01:10	10 min	80-250m
18.06.2021 01:20	10 min	120-250m
18.06.2021 01:30	10 min	100-250m
18.06.2021 01:40	10 min	80-250m
18.06.2021 01:50	10 min	120-250m
18.06.2021 02:00	10 min	100-250m
18.06.2021 02:10	10 min	120-250m
18.06.2021 02:20	10 min	160-250m
18.06.2021 02:30	10 min	120-250m
18.06.2021 02:40	10 min	80-250m
18.06.2021 02:50	10 min	100-250m
18.06.2021 03:00	10 min	160-250m
18.06.2021 03:10	10 min	180-250m
18.06.2021 03:20	10 min	140-250m
18.06.2021 05:20	40 min	80-250m
18.06.2021 06:00	10 min	100-250m
18.06.2021 06:10	20 min	120-250m
18.06.2021 07:50	10 min	250m
18.06.2021 20:10	20 min	250m
18.06.2021 20:50	30 min	250m
18.06.2021 21:20	20 min	200-250m
18.06.2021 22:40	10 min	200-250m
18.06.2021 22:50	10 min	180-250m
18.06.2021 23:00	10 min	250m
19.06.2021 04:50	10 min	140-250m
19.06.2021 05:00	10 min	100-250m
19.06.2021 05:10	30 min	80-250m
19.06.2021 05:40	10 min	60-250m
19.06.2021 05:50	10 min	80-250m
19.06.2021 06:10	20 min	120m 140m 180-250m
19.06.2021 06:30	10 min	160m 200-250m
19.06.2021 06:50	10 min	120-250m
19.06.2021 07:00	10 min	100-250m
19.06.2021 07:10	10 min	120-250m
19.06.2021 07:20	10 min	100-250m
19.06.2021 07:30	10 min	140-250m

Table E.10: Gaps in the wind dataset of Deployment 10 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
19.06.2021 07:40	10 min	160-250m
19.06.2021 07:50	20 min	120-250m
19.06.2021 08:10	20 min	250m
19.06.2021 09:20	20 min	250m
19.06.2021 09:40	10 min	160-250m
20.06.2021 05:50	10 min	120-250m
20.06.2021 06:00	10 min	100m 140m 180m
20.06.2021 07:30	10 min	250m

E.11 Deployment 11

Table E.11: Gaps in the wind dataset of Deployment 11 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
25.01.2021 16:00	10 min	Gill data missing
29.01.2021 08:10	10 min	120-250m
29.01.2021 09:20	10 min	120m 160m 200-250m
29.01.2021 09:40	10 min	160m 250m
29.01.2021 10:20	30 min	80-250m
29.01.2021 11:10	20 min	80-250m
29.01.2021 11:40	10 min	250m
29.01.2021 11:50	50 min	80-250m
29.01.2021 12:40	10 min	80m 160m
29.01.2021 12:50	10 min	80m 120m 160m 180m 200m
29.01.2021 16:40	10 min	80-250m
02.02.2021 22:30	10 min	120m
04.02.2021 22:40	10 min	160m
06.02.2021 02:10	10 min	250m
06.02.2021 02:20	10 min	80m 120m 160m 180m
06.02.2021 02:30	10 min	80m
06.02.2021 02:50	10 min	100m 140m 200m
06.02.2021 10:00	10 min	80-250m
07.02.2021 23:50	10 min	Gill data missing
08.02.2021 21:40	10 min	40m
09.02.2021 14:10	20 min	30m
09.02.2021 20:00	10 min	30m
09.02.2021 22:00	10 min	40m
09.02.2021 22:50	10 min	100m 200-250m
10.02.2021 00:10	10 min	100m 120m 200m
10.02.2021 01:10	20 min	80-250m
10.02.2021 03:30	10 min	30m
10.02.2021 09:50	10 min	30m
10.02.2021 13:20	10 min	40m
11.02.2021 03:40	10 min	200m
11.02.2021 06:10	10 min	80m
11.02.2021 06:50	10 min	200m
11.02.2021 08:20	10 min	250m
11.02.2021 09:30	10 min	30m 40m 80m 120m 140m
11.02.2021 10:00	10 min	30m 40m
11.02.2021 10:10	10 min	60m
11.02.2021 10:20	10 min	30m
11.02.2021 16:20	10 min	40m
11.02.2021 18:10	10 min	30m

Table E.11: Gaps in the wind dataset of Deployment 11 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
11.02.2021 19:00	10 min	40m
11.02.2021 20:30	10 min	40m
11.02.2021 20:40	10 min	30m 40m
11.02.2021 21:50	10 min	30m 40m
12.02.2021 00:10	10 min	40m
12.02.2021 02:00	10 min	30m
12.02.2021 03:00	10 min	200-250m
12.02.2021 04:20	10 min	30m 200-250m
12.02.2021 04:30	10 min	30m
12.02.2021 04:40	10 min	30m 180m 200m
12.02.2021 04:50	10 min	30m 160-250m
12.02.2021 05:20	20 min	30m 40m
15.02.2021 15:10	10 min	250m
15.02.2021 15:20	20 min	160-250m
15.02.2021 15:40	30 min	140-250m
15.02.2021 16:10	10 min	120-250m
15.02.2021 16:20	50 min	100-250m
15.02.2021 17:10	10 min	80-250m
15.02.2021 17:20	40 min	100-250m
15.02.2021 18:00	10 min	80-250m

E.12 Deployment 12

Table E.12: Gaps in the wind dataset of Deployment 12 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
03.03.2021 08:10	2 hours 20 min	60-250m
03.03.2021 10:30	10 min	80-250m
03.03.2021 10:40	10 min	60-250m
03.03.2021 10:50	20 min	80-250m
03.03.2021 11:10	20 min	60-250m
03.03.2021 11:30	1 hours 10 min	80-250m
03.03.2021 12:40	10 min	100-250m
03.03.2021 12:50	10 min	80-250m
03.03.2021 13:00	20 min	100-250m
03.03.2021 13:20	10 min	80-250m
03.03.2021 13:30	20 min	100-250m
03.03.2021 13:50	10 min	120-250m
03.03.2021 14:00	10 min	200-250m
08.03.2021 14:00	10 min	250m
08.03.2021 15:00	10 min	140m 160m 180m 200m
09.03.2021 00:10	10 min	160-250m
09.03.2021 00:20	20 min	140-250m
09.03.2021 00:40	20 min	120-250m
09.03.2021 01:00	40 min	140-250m
09.03.2021 01:40	30 min	120-250m
09.03.2021 02:10	10 min	100-250m
09.03.2021 02:20	10 min	60m 100-250m
09.03.2021 02:30	40 min	60-250m
09.03.2021 03:10	10 min	80-250m
09.03.2021 03:20	10 min	60-250m
09.03.2021 03:30	1 hours 00 min	80-250m
09.03.2021 04:30	10 min	100-250m
09.03.2021 04:40	10 min	80-250m
09.03.2021 04:50	40 min	100-250m
09.03.2021 05:30	10 min	140-250m
09.03.2021 05:40	10 min	120-250m
09.03.2021 05:50	10 min	80m 100m 120m 140m 160m
10.03.2021 05:30	10 min	80m
16.03.2021 14:50	10 min	Gill data missing
16.03.2021 19:30	10 min	80-250m
16.03.2021 20:00	10 min	120m
16.03.2021 20:10	10 min	80-250m
20.03.2021 06:50	10 min	100m 160m 200m
20.03.2021 08:20	10 min	80m 100m 120m 140m 160m

Table E.12: Gaps in the wind dataset of Deployment 12 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
20.03.2021 11:00	10 min	250m
20.03.2021 11:10	10 min	180-250m
20.03.2021 11:20	10 min	160-250m
20.03.2021 12:30	10 min	30m 80-250m
20.03.2021 18:40	20 min	200m
20.03.2021 19:00	10 min	120-250m
20.03.2021 19:10	10 min	100-250m
20.03.2021 19:20	10 min	140-250m
20.03.2021 22:20	10 min	180-250m
20.03.2021 22:30	10 min	140-250m
20.03.2021 22:40	10 min	100-250m
20.03.2021 22:50	10 min	80-250m
20.03.2021 23:00	20 min	100-250m
25.03.2021 06:30	30 min	250m
25.03.2021 07:00	20 min	160-250m
25.03.2021 07:20	10 min	140-250m
25.03.2021 07:30	20 min	120-250m
25.03.2021 07:50	10 min	140-250m
25.03.2021 08:00	30 min	160-250m
25.03.2021 08:30	10 min	180-250m
25.03.2021 08:40	10 min	200-250m
25.03.2021 08:50	10 min	160-250m
25.03.2021 09:00	10 min	180-250m
25.03.2021 09:10	10 min	140-250m
25.03.2021 09:20	10 min	160-250m
25.03.2021 09:30	10 min	180-250m
25.03.2021 09:40	30 min	160-250m
25.03.2021 10:10	10 min	180-250m
25.03.2021 10:30	10 min	160-250m
25.03.2021 10:40	10 min	80-250m
25.03.2021 10:50	10 min	100-250m
25.03.2021 11:00	20 min	80-250m
25.03.2021 11:20	10 min	80m 120-250m
25.03.2021 11:30	30 min	80-250m
25.03.2021 12:00	10 min	120-250m
25.03.2021 12:10	20 min	250m
25.03.2021 12:40	20 min	250m
25.03.2021 15:40	30 min	250m
25.03.2021 16:30	40 min	250m
25.03.2021 17:10	10 min	200-250m
25.03.2021 17:20	10 min	250m

Table E.12: Gaps in the wind dataset of Deployment 12 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
25.03.2021 17:30	10 min	200-250m
25.03.2021 17:40	10 min	250m
29.03.2021 19:20	20 min	250m
29.03.2021 19:50	10 min	250m
29.03.2021 20:30	30 min	250m
29.03.2021 21:10	10 min	250m
29.03.2021 21:40	10 min	250m
29.03.2021 22:10	10 min	250m
30.03.2021 03:10	10 min	250m
30.03.2021 03:30	10 min	250m
30.03.2021 12:30	10 min	Gill data missing
01.04.2021 01:30	10 min	80-250m
01.04.2021 01:40	10 min	140-250m
01.04.2021 14:10	10 min	140m
01.04.2021 14:50	10 min	80m 100m 120m 140m 160m 180m 250m
01.04.2021 22:00	10 min	80-250m
01.04.2021 23:40	10 min	80-250m
02.04.2021 02:50	10 min	250m
02.04.2021 03:00	10 min	80m 120m 140m 160m
02.04.2021 05:30	10 min	80m 120m
02.04.2021 06:20	10 min	80m 140m
02.04.2021 06:30	10 min	250m
02.04.2021 06:40	10 min	80m 100m 140m 180m
02.04.2021 07:00	10 min	140m 180m
04.04.2021 06:50	10 min	140m
06.04.2021 11:50	10 min	Gill data missing
06.04.2021 16:50	10 min	Gill data missing
07.04.2021 23:30	10 min	Gill data missing
10.04.2021 18:10	10 min	Gill data missing
12.04.2021 00:50	10 min	Gill data missing
25.04.2021 22:40	10 min	Gill data missing

E.13 Deployment 13

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.05.2021 09:50	10 min	Gill data missing
06.05.2021 20:10	10 min	120m 200m
06.05.2021 20:20	10 min	40m 80m
09.05.2021 12:20	10 min	180m 200m
09.05.2021 12:30	10 min	120m 140m 160m 180m 200m
09.05.2021 12:40	10 min	180m 200m
09.05.2021 22:20	10 min	120m 140m 160m 180m 200m
10.05.2021 00:50	10 min	180m 200m
10.05.2021 01:00	10 min	160m 180m 200m
10.05.2021 01:10	10 min	80m 100m 120m 140m 160m 180m 200m
10.05.2021 01:20	10 min	200m
10.05.2021 01:40	10 min	80m 100m 120m 140m 160m 180m 200m
10.05.2021 03:20	10 min	180m 200m
10.05.2021 03:30	10 min	80m 100m 120m 140m 160m 180m 200m
10.05.2021 03:40	20 min	140m 160m 180m 200m
10.05.2021 10:20	20 min	160m 180m 200m
10.05.2021 10:40	20 min	120m 140m 160m 180m 200m
10.05.2021 11:00	10 min	140m 160m 180m 200m
10.05.2021 11:30	10 min	160m
11.05.2021 23:20	10 min	160m 180m 200m
11.05.2021 23:30	10 min	120m 140m 160m 180m 200m
11.05.2021 23:40	20 min	100m 120m 140m 160m 180m 200m
12.05.2021 00:20	20 min	140m 160m 180m 200m
12.05.2021 00:40	10 min	120m 140m 160m 180m 200m
12.05.2021 00:50	40 min	100m 120m 140m 160m 180m 200m
12.05.2021 01:30	10 min	80m 100m 120m 140m 160m 180m 200m
12.05.2021 01:40	20 min	100m 120m 140m 160m 180m 200m
12.05.2021 02:00	30 min	60m 80m 100m 120m 140m 160m 180m 200m
12.05.2021 02:30	10 min	60m 80m 100m 120m 140m 160m 180m 200m
12.05.2021 02:40	10 min	80m 100m 120m 140m 160m
12.05.2021 02:50	10 min	120m
12.05.2021 03:00	20 min	120m 140m 160m 180m 200m
12.05.2021 06:30	20 min	100m 120m 140m 160m 180m 200m
12.05.2021 07:10	10 min	80m 100m 120m 140m 160m 180m 200m
12.05.2021 07:20	40 min	60m 80m 100m 120m 140m 160m 180m 200m
12.05.2021 08:00	10 min	60m 100m 120m 140m 160m 180m 200m
12.05.2021 18:10	10 min	200m
12.05.2021 18:20	20 min	180m 200m
12.05.2021 18:40	10 min	200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
12.05.2021 18:50	50 min	160m 180m 200m
12.05.2021 19:40	10 min	180m 200m
12.05.2021 19:50	30 min	160m 180m 200m
12.05.2021 20:20	10 min	200m
12.05.2021 20:40	10 min	160m 180m 200m
12.05.2021 20:50	10 min	180m 200m
12.05.2021 21:00	10 min	140m 160m 180m 200m
12.05.2021 21:10	30 min	160m 180m 200m
12.05.2021 21:50	10 min	40m
12.05.2021 22:20	10 min	140m 160m 180m 200m
12.05.2021 22:40	10 min	140m 160m 180m 200m
12.05.2021 22:50	20 min	120m 140m 160m 180m 200m
12.05.2021 23:10	10 min	100m 120m 140m 160m 180m 200m
12.05.2021 23:20	20 min	120m 140m 160m 180m 200m
12.05.2021 23:50	20 min	120m 140m 160m 180m 200m
13.05.2021 00:10	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 00:20	10 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 00:30	30 min	100m 120m 140m 160m 180m 200m
13.05.2021 01:00	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 01:10	30 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 01:40	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 01:50	10 min	160m 180m
13.05.2021 02:00	30 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 02:30	10 min	100m 120m 140m 160m 180m 200m
13.05.2021 02:40	10 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 02:50	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 03:00	40 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 03:40	10 min	120m 140m 160m 180m 200m
13.05.2021 03:50	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 04:00	20 min	140m 160m 180m 200m
13.05.2021 04:20	10 min	180m 200m
13.05.2021 04:40	1 hours 20 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 06:00	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 06:10	10 min	60m 80m 100m 120m 140m 160m 180m 200m
13.05.2021 06:20	1 hours 20 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 07:40	10 min	140m 160m 180m 200m
13.05.2021 07:50	10 min	160m 180m 200m
13.05.2021 10:40	10 min	120m
13.05.2021 11:10	10 min	80m 140m 160m
13.05.2021 11:20	10 min	100m 120m 140m 160m 200m
13.05.2021 11:30	10 min	80m 100m 120m 140m 160m 180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
13.05.2021 12:20	10 min	160m
13.05.2021 12:40	10 min	100m 120m 140m 160m 180m
13.05.2021 12:50	10 min	80m 100m 120m 140m 160m 180m 200m
13.05.2021 14:40	10 min	120m
13.05.2021 18:50	20 min	30m 80m 100m 120m 140m 160m 180m 200m
14.05.2021 01:40	10 min	180m
14.05.2021 03:10	10 min	80m 100m 120m 140m 160m 180m 200m
15.05.2021 06:50	10 min	140m
15.05.2021 07:20	10 min	80m 100m
16.05.2021 14:00	10 min	Gill data missing
16.05.2021 19:10	10 min	100m 160m 180m 200m
16.05.2021 19:20	10 min	100m 180m
16.05.2021 20:10	10 min	80m 100m 120m 140m 160m 180m 200m
16.05.2021 22:40	10 min	80m 100m 120m 140m 160m 180m 200m
17.05.2021 00:10	10 min	80m 100m 120m 140m 160m 180m 200m
17.05.2021 00:20	10 min	140m 160m 180m 200m
17.05.2021 03:40	10 min	80m 100m
17.05.2021 05:40	10 min	160m
17.05.2021 06:00	10 min	140m 160m 180m 200m
17.05.2021 07:20	10 min	180m 200m
17.05.2021 07:30	10 min	80m 100m 120m 140m 160m 180m 200m
17.05.2021 07:40	10 min	200m
17.05.2021 08:50	10 min	80m 100m 120m 140m 160m 180m 200m
24.05.2021 23:50	10 min	120m
25.05.2021 00:10	10 min	60m 80m 100m 120m 140m 160m 180m 200m
25.05.2021 00:20	10 min	30m 60m 80m 100m 120m 140m 160m 180m 200m
25.05.2021 00:30	10 min	80m 100m 120m 140m 180m
26.05.2021 02:20	10 min	160m
26.05.2021 02:50	10 min	160m 200m
26.05.2021 03:00	10 min	80m 100m 120m 140m 160m 180m 200m
28.05.2021 05:30	10 min	30m 80m 100m 120m 140m 160m 180m 200m
28.05.2021 05:40	10 min	80m 100m 120m 140m 160m 180m 200m
28.05.2021 21:10	10 min	80m 120m 160m
29.05.2021 01:50	10 min	80m 100m 120m 140m 160m 180m 200m
29.05.2021 05:40	10 min	140m 180m 200m
29.05.2021 06:00	20 min	200m
29.05.2021 09:30	10 min	100m 120m 140m 160m 200m
29.05.2021 14:30	10 min	Gill data missing
29.05.2021 21:50	10 min	100m 120m 140m 160m 180m 200m
31.05.2021 12:20	10 min	200m
31.05.2021 12:30	10 min	160m 180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
31.05.2021 12:40	10 min	120m 140m 160m 180m 200m
31.05.2021 12:50	30 min	100m 120m 140m 160m 180m 200m
31.05.2021 13:20	10 min	160m 180m 200m
31.05.2021 15:40	10 min	200m
31.05.2021 16:00	10 min	200m
31.05.2021 16:20	20 min	200m
31.05.2021 16:40	40 min	180m 200m
31.05.2021 17:20	20 min	160m 180m 200m
31.05.2021 17:40	20 min	140m 160m 180m 200m
31.05.2021 18:00	10 min	160m 180m 200m
31.05.2021 18:10	10 min	60m 80m 100m 120m 140m 160m 180m 200m
31.05.2021 18:20	10 min	120m 140m 160m 180m 200m
31.05.2021 18:40	10 min	80m 100m 120m 140m 160m 180m 200m
31.05.2021 18:50	10 min	180m 200m
31.05.2021 19:20	20 min	80m 100m 120m 140m 160m 180m 200m
31.05.2021 19:40	10 min	60m 80m 100m 120m 140m 160m 180m 200m
03.06.2021 11:10	20 min	160m 180m 200m
03.06.2021 11:30	10 min	180m 200m
04.06.2021 02:00	10 min	200m
04.06.2021 02:10	20 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 02:30	2 hours 40 min	60m 80m 100m 120m 140m 160m 180m 200m
04.06.2021 05:10	10 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 05:20	10 min	60m 80m 100m 120m 140m 160m 180m 200m
04.06.2021 05:30	3 hours 40 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 09:10	40 min	100m 120m 140m 160m 180m 200m
04.06.2021 09:50	20 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 10:10	10 min	100m 120m 140m 160m 180m 200m
04.06.2021 10:20	10 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 10:30	1 hours 10 min	100m 120m 140m 160m 180m 200m
04.06.2021 11:40	20 min	120m 140m 160m 180m 200m
04.06.2021 12:00	30 min	100m 120m 140m 160m 180m 200m
04.06.2021 12:30	10 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 12:40	20 min	100m 120m 140m 160m 180m 200m
04.06.2021 13:00	10 min	120m 140m 160m 180m 200m
04.06.2021 13:10	10 min	160m 180m 200m
04.06.2021 13:20	10 min	200m
04.06.2021 13:30	10 min	160m 180m 200m
04.06.2021 13:50	10 min	100m 140m 160m 180m 200m
04.06.2021 14:00	20 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 15:00	10 min	140m 160m 180m 200m
04.06.2021 15:10	20 min	80m 100m 120m 140m 160m 180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
04.06.2021 15:30	10 min	60m 80m 100m 120m 140m 160m 180m 200m
04.06.2021 15:40	40 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 16:20	30 min	100m 120m 140m 160m 180m 200m
04.06.2021 16:50	10 min	120m 140m 160m 180m 200m
04.06.2021 17:00	10 min	100m 120m 140m 160m 180m 200m
04.06.2021 17:20	10 min	100m 120m 140m 160m 180m 200m
04.06.2021 17:30	10 min	80m 100m 120m 140m 160m 180m 200m
04.06.2021 17:40	10 min	60m 80m 100m 120m 140m 160m 180m 200m
04.06.2021 19:00	5 hours 10 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 00:10	30 min	60m 80m 100m 120m 140m 160m 180m 200m
05.06.2021 00:40	10 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 00:50	20 min	60m 80m 100m 120m 140m 160m 180m 200m
05.06.2021 01:10	20 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 01:30	50 min	60m 80m 100m 120m 140m 160m 180m 200m
05.06.2021 02:20	30 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 02:50	1 hours 50 min	60m 80m 100m 120m 140m 160m 180m 200m
05.06.2021 04:40	20 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 05:00	20 min	60m 80m 100m 120m 140m 160m 180m 200m
05.06.2021 05:20	30 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 07:00	10 min	160m 180m 200m
05.06.2021 10:10	10 min	180m 200m
05.06.2021 11:30	10 min	160m 180m 200m
05.06.2021 11:40	20 min	140m 160m 180m 200m
05.06.2021 12:00	10 min	120m 140m 160m 180m 200m
05.06.2021 12:10	10 min	140m 160m 180m 200m
05.06.2021 12:20	10 min	160m 180m 200m
05.06.2021 15:30	10 min	180m
05.06.2021 17:20	10 min	100m 120m
05.06.2021 22:10	10 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 22:20	10 min	180m
05.06.2021 22:30	10 min	100m 120m 160m 180m 200m
05.06.2021 22:50	10 min	80m 100m 120m 140m 160m 180m 200m
05.06.2021 23:40	20 min	120m
06.06.2021 00:10	10 min	180m
06.06.2021 00:20	10 min	80m 100m 140m 160m 180m 200m
06.06.2021 00:30	10 min	80m 100m 120m 140m 160m 180m 200m
07.06.2021 05:50	30 min	80m 100m 120m 140m 160m 180m 200m
07.06.2021 06:20	10 min	180m 200m
07.06.2021 06:40	10 min	200m
07.06.2021 07:20	10 min	140m 160m 180m 200m
07.06.2021 08:50	10 min	160m 180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
07.06.2021 09:10	10 min	180m 200m
07.06.2021 09:20	10 min	200m
07.06.2021 19:00	10 min	140m 160m 180m 200m
07.06.2021 19:10	10 min	120m 140m 160m 180m 200m
07.06.2021 19:30	20 min	140m 160m 180m 200m
07.06.2021 19:50	10 min	120m 140m 160m 180m 200m
07.06.2021 20:00	10 min	140m 160m 180m 200m
07.06.2021 20:10	10 min	120m 140m 160m 180m 200m
07.06.2021 20:20	10 min	160m 180m 200m
07.06.2021 20:30	10 min	120m 140m 160m 180m 200m
07.06.2021 20:40	10 min	100m 120m 140m 160m 180m 200m
07.06.2021 20:50	40 min	80m 100m 120m 140m 160m 180m 200m
07.06.2021 21:30	10 min	60m 80m 100m 120m 140m 160m 180m 200m
07.06.2021 21:40	10 min	80m 100m 120m 140m 160m 180m 200m
07.06.2021 21:50	40 min	60m 80m 100m 120m 140m 160m 180m 200m
07.06.2021 22:30	20 min	80m 100m 120m 140m 160m 180m 200m
07.06.2021 22:50	10 min	60m 80m 100m 120m 140m 160m 180m 200m
07.06.2021 23:00	3 hours 50 min	80m 100m 120m 140m 160m 180m 200m
08.06.2021 02:50	30 min	100m 120m 140m 160m 180m 200m
08.06.2021 03:20	20 min	80m 100m 120m 140m 160m 180m 200m
08.06.2021 03:40	10 min	100m 120m 140m 160m 180m 200m
08.06.2021 03:50	2 hours 40 min	80m 100m 120m 140m 160m 180m 200m
08.06.2021 06:30	50 min	100m 120m 140m 160m 180m 200m
08.06.2021 07:20	10 min	140m 160m 180m 200m
08.06.2021 07:30	10 min	120m 140m 160m 180m 200m
08.06.2021 07:40	30 min	100m 120m 140m 160m 180m 200m
08.06.2021 08:10	10 min	80m 100m 120m 140m 160m 180m 200m
08.06.2021 08:20	20 min	100m 120m 140m 160m 180m 200m
08.06.2021 08:40	10 min	80m 100m 120m 140m 160m 180m 200m
08.06.2021 08:50	20 min	100m 120m 140m 160m 180m 200m
08.06.2021 09:10	10 min	120m 140m 160m 180m 200m
08.06.2021 09:20	10 min	100m 120m 140m 160m 180m 200m
08.06.2021 09:30	10 min	180m 200m
08.06.2021 09:40	10 min	120m 140m 160m 180m 200m
08.06.2021 09:50	20 min	140m 160m 180m 200m
08.06.2021 10:10	10 min	200m
08.06.2021 10:20	10 min	160m 180m 200m
08.06.2021 10:30	10 min	120m 140m 160m 180m 200m
08.06.2021 10:40	20 min	140m 160m 180m 200m
08.06.2021 11:00	10 min	160m 180m 200m
08.06.2021 11:10	10 min	120m 140m 160m 180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
08.06.2021 15:10	10 min	160m
08.06.2021 17:40	10 min	30m
08.06.2021 23:50	30 min	30m
11.06.2021 12:40	10 min	Gill data missing
11.06.2021 14:10	2 hours 10 min	80m 100m 120m 140m 160m 180m 200m
11.06.2021 16:20	10 min	100m 120m 140m 160m 180m 200m
11.06.2021 16:30	10 min	80m 100m 120m 140m 160m 180m 200m
11.06.2021 16:40	10 min	100m 120m 140m 160m 180m 200m
11.06.2021 16:50	2 hours 20 min	80m 100m 120m 140m 160m 180m 200m
11.06.2021 19:10	10 min	100m 120m 140m 160m 180m 200m
11.06.2021 19:20	10 min	120m 140m 160m 180m 200m
11.06.2021 19:40	10 min	80m 140m 160m 180m 200m
11.06.2021 19:50	10 min	120m 160m 180m 200m
11.06.2021 20:00	10 min	120m 140m 160m 180m 200m
17.06.2021 20:50	30 min	80m 100m 120m 140m 160m 180m 200m
17.06.2021 21:20	1 hours 40 min	60m 80m 100m 120m 140m 160m 180m 200m
17.06.2021 23:00	10 min	80m 100m 120m 140m 160m 180m 200m
17.06.2021 23:10	30 min	60m 80m 100m 120m 140m 160m 180m 200m
17.06.2021 23:40	2 hours 20 min	80m 100m 120m 140m 160m 180m 200m
18.06.2021 02:00	20 min	100m 120m 140m 160m 180m 200m
18.06.2021 02:20	40 min	80m 100m 120m 140m 160m 180m 200m
18.06.2021 03:00	20 min	100m 120m 140m 160m 180m 200m
18.06.2021 03:20	10 min	120m 140m 160m 180m 200m
18.06.2021 04:30	10 min	180m 200m
18.06.2021 04:40	20 min	120m 140m 160m 180m 200m
18.06.2021 05:00	1 hours 20 min	80m 100m 120m 140m 160m 180m 200m
18.06.2021 06:40	20 min	80m 100m 120m 140m 160m 180m 200m
18.06.2021 13:30	10 min	200m
19.06.2021 04:50	10 min	120m 140m 160m 180m 200m
19.06.2021 05:00	30 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 05:30	20 min	60m 80m 100m 120m 140m 160m 180m 200m
19.06.2021 05:50	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 06:20	20 min	120m 140m 160m 180m 200m
19.06.2021 06:50	30 min	100m 120m 140m 160m 180m 200m
19.06.2021 07:20	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 07:30	10 min	120m 140m 160m 180m 200m
19.06.2021 07:40	10 min	80m 120m 140m 160m 180m 200m
19.06.2021 07:50	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 08:00	10 min	120m 140m 160m 180m 200m
19.06.2021 08:20	10 min	180m 200m
19.06.2021 09:30	10 min	180m 200m

Table E.13: Gaps in the wind dataset of Deployment 13 in addition to those covered in the post-processing *WindResourceStatusFlags*.

Start time	Duration	Missing data at height(s) (m)
19.06.2021 09:40	10 min	160m 180m 200m
19.06.2021 13:20	10 min	140m 180m
19.06.2021 13:40	10 min	80m
19.06.2021 14:00	30 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 14:40	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 15:00	10 min	80m 180m 200m
19.06.2021 15:10	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 15:20	10 min	120m 200m
19.06.2021 15:40	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 16:10	10 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 17:00	10 min	80m 100m 120m
19.06.2021 20:20	40 min	80m 100m 120m 140m 160m 180m 200m
19.06.2021 21:00	10 min	100m 200m
19.06.2021 21:40	10 min	80m 100m 120m 140m 160m 200m
20.06.2021 03:40	10 min	180m 200m
20.06.2021 06:00	10 min	200m
20.06.2021 07:10	20 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 07:30	10 min	200m
20.06.2021 09:20	10 min	120m 160m 180m
20.06.2021 09:40	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 09:50	10 min	100m 120m 140m 160m 200m
20.06.2021 10:00	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 10:10	10 min	80m 140m 160m 180m 200m
20.06.2021 10:40	10 min	160m 200m
20.06.2021 10:50	10 min	80m 120m 140m 160m 180m 200m
20.06.2021 11:10	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 11:50	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 13:10	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 13:20	10 min	80m 100m 120m 140m 160m 200m
20.06.2021 13:30	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 13:40	10 min	100m
20.06.2021 13:50	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 14:20	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 19:20	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 19:50	10 min	80m 100m 120m 140m 160m 180m 200m
20.06.2021 20:10	10 min	140m



The creative commons license terms 4.0 CC BY apply to this material. Please take notice of the general terms "Creative Commons Attribution 4.0 International public License" before starting to use the license. These terms can be accessed by clicking on this link <https://creativecommons.org/licenses/>

This investigation was carried out by Fugro, commissioned by RVO, an agency of the Ministry of Economic Affairs and Climate Policy.

Whilst a great deal of care has been taken in compiling the contents of this investigation, RVO can not be held liable for any damages resulting from any inaccuracies and/or outdated information.

The information in this document is valid at the time of publishing (see month/year). Updates will be published on the website <https://offshorewind.rvo.nl/> at the relevant Wind Farm Site, General Information, submap Revision Log and Q & A. In the Revision Log is indicated which versions are the latest and what the changes are in relation to previous versions. The documents can be found at the relevant sites, indicated in the List of all reports and deliverables.

Contacts
Netherlands Enterprise Agency (RVO)
Croeselaan 15 | 3521 BJ | Utrecht
P.O. Box 8242 | 3503 RE | Utrecht
www.rvo.nl / <https://english.rvo.nl>

Netherlands Enterprise Agency (RVO) | January 2022