

Reference Site Technical Report C: Reference Site 3 Preliminary Metocean Site Conditions Assessment (Kinsale Alpha)

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Author(s): Dallán Friel, Sowmya Reddy Gudipati, Shauna Creane

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This project is closely coordinated with the IEA Wind TCP Task 49 – Integrated Design of floating wind Arrays (IDeA)<sup>1</sup>



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Primary Author(s)	Dallán Friel & Shauna Creane					
Co-Author(s)	Sowmya Reddy Gudipati					

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## IDEA-IRL WP1 D1C

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## **Executive Summary**

This report presents a preliminary Front-End Engineering Design (FEED) Metocean Study for the Integrated Design of Floating Wind Arrays - Ireland's (IDEA-IRL) reference site 3. The results presented herein can only be considered as a pre-FEED study and are aimed to serve as input for preliminary design. This report will primarily serve as an appendix to the Summary Report for Work Package 1 (WP1) Deliverable (D1), which collates the various site conditions defined as part of WP1 D1. These conditions will be provided to WP2 of the IDEA-IRL project, to inform reference floating offshore wind farm designs.

Reference site 3 utilises the 'Kinsale Energy Alpha Platform' as a reference point for data collection. It is located 25.6 km from Roches Point in County Cork in the Celtic Sea.

To conduct a preliminary site characterisation study at this location, a 43-year time series was utilised from the ERA5 reanalysis dataset for wind and wave conditions, and a measured 40-year time series was utilised from the Kinsale Alpha Platform. The ERA5 dataset was used to gap-fill and assess the appropriateness of the measured data to the ERA5 dataset. A 12-year modelled time series was extracted for water levels and currents from the three-dimensional Northeast Atlantic Model (NEATL), an implementation of the Regional Ocean Modelling System (ROMS) model.

Normal, extreme and severe metocean statistics and parameters were generated from these datasets. Operability statistics such as wind-wave persistence were also generated. A summary of the parameters most relevant to the design is presented in Table 1-1.

Table 1-1 Summary of metocean conditions at Kinsale Alpha Platform.

Variable	Value		
High Still Water Level (50-year) (mMSL)	3.71		
High Still Water Level (1-year) (mMSL)	2.64		
Highest Astronomical Tide (HAT) (mMSL)	2.03		
Lowest Astronomical Tide (LAT) (mMSL)	-2.05		
Low Still Water Level (1-year) (mMSL)	-1.58		
Low Still Water Level (50-year) (mMSL)	-1.25		
Bottom current speed (m/s) (Normal Conditions)	Mean: 0.11		
	Max: 0.32		
	P25: 0.07		
	P50: 0.11		
	P75: 0.15		
Bottom current speed (m/s) (1-year)	0.28		
Bottom current speed (m/s) (50-year)	0.32		
Mid current speed (m/s) (Normal Conditions)	Mean: 0.21		

	Max: 0.69
	P25: 0.11
	P50: 0.19
	P75: 0.29
Mid current speed (m/s) (1-year)	0.58
Mid current speed (m/s) (50-year)	0.97
Surface current speed (m/s) (Normal Conditions)	Mean: 0.24
	Max: 0.98
	P25: 0.14
	P50: 0.22
	P75: 0.33
Surface current speed (m/s) (1-year)	0.83
Surface current speed (m/s) (50-year)	1.41
Wind speed (150 m above sea level) (m/s) mean	10.7
Wind speed (150 m above sea level) (m/s) max	42.4
Wind speed (150 m above sea level) (m/s) P95	20.3
Wind direction (150 m above sea level) (°) mean	245.5
Wind speed (10 m above sea level) – Weibull parameters	A = 8.54; k = 2.15
Wind speed (150 m above sea level) – Weibull parameters	A = 12.03; k = 2.10
Extreme 10-min wind speed (150 m above sea level) (m/s) (1-year)	25.13
Extreme 10-min wind speed (150 m above sea level) (m/s) (50-year)	47.44
Extreme 10-min wind speed (150 m above sea level) (m/s) (100-year)	48.88
Normal Sea State (NSS)	See relevant report section
Extreme Sea State (ESS) – Significant wave height (1-year) (m)	7.74
ESS – Peak wave period (1-year) (s)	10.96 ≤ 14.11
ESS – Individual maximum wave height (1-year) (m)	14.40

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ESS – Period of maximum wave height (1-year) (s)	9.86 ≤ 12.70
ESS – Significant wave height (50-year) (m)	15.15
ESS – Peak wave period (50-year) (s)	15.33 ≤ 19.74
ESS – Individual maximum wave height (50-year) (m)	28.18
ESS – Period of maximum wave height (50-year) (s)	13.80 ≤ 17.77
Severe Sea State	See relevant report section

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### 1 Introduction

This report appendix has been prepared by the IDEA-IRL project as one of the deliverables for WP1 of the project. It primarily serves as an Appendix to the WP1 D1 summary report [1]. Specifically, this technical appendix delivers a preliminary metocean site characterisation study of reference site 3, selected based on a review of Ireland's Offshore Wind Policy and Marine Spatial Planning documents provided by WP4 [2], [3].

This selection process is explained in Section 4 of [1], but in summary, at the time of writing, there is no clarity on when or where floating offshore wind will be developed in Ireland in the coming years. For IDEA-IRL, it was therefore decided to choose two reference sites off the Irish south coast (one on the south west, and one on the south east).

#### Reasons for this decision include:

- A west coast site was chosen for Reference Site 1, which will give a demonstration of Atlantic conditions (see [4])
- The east coast is seen as an area primarily for fixed-bottom Phase 1 development, and not expected to be a priority area for floating offshore wind long term
- The inclusion of a site on the north-west coast was considered, but this was not seen as a priority area for future floating offshore wind development
- The south coast is seen as an area of great interest for the future development of floating offshore wind in Ireland, where several projects had been planned under the developer-led regime, before the Phase 2 Policy Statement was released and the switch to a plan led delivery model was accelerated
- There was good data availability in the areas chosen

Therefore, IDEA-IRL's defined reference site 3 utilises the coordinates of the Kinsale Energy Alpha Platform (51.36081°, -7.947°) as a reference point for data collation (Figure 1-1).

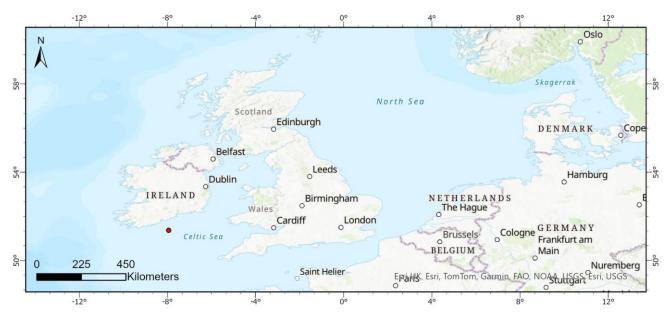


Figure 1-1 – Kinsale Energy Alpha Platform data collation point, chosen as IDEA-IRL reference site 3

#### 1.1 Scope of the report

The scope of this report is to conduct a preliminary FEED Metocean Study for IDEA-IRL reference site 3. The results presented herein can only be considered as a pre-FEED study and are aimed to serve as input for preliminary design. Section 2 gives an overview of the data sources utilised; Section 3 provides the results of a preliminary metocean site characterisation. This includes the production of normal and extreme conditions of water levels, currents, wind and wave conditions, alongside operability statistics. Section 4 provides conclusions and recommendations.

#### 2 Data Sources

The coordinates of the Kinsale Energy Alpha Platform is used as a reference point for metocean data compilation. The European Centre for Medium-Range Weather Forecasts (ECMWF) ERA5 climate reanalysis model was identified as the best model to provide numerical datasets for wind and wave variables for this study. ERA5 is the fifth-generation atmospheric reanalysis model produced by Copernicus Climate Change Service (C3S) at the ECMWF and is based on the 2016 version of the integrated forecasting system (C3S, 2017). It produces data from 1950 to present. Its outputs include atmospheric, ocean wave and land surface data. The reanalysis combines model data with observations from across the world into a globally complete and consistent dataset. The horizontal resolution of the model is 0.25° x 0.25° (atmosphere variables) and 0.5° x 0.5° (ocean waves variables). Parameters of interest for this study are displayed in Table 2-1. Data from the closest grid point to the site were downloaded and analysed. A detailed description of the model and each parameter can be found on the ECMWF website [5].

Due to the lack of availability of measured water level and tidal current data for the site of interest, modelled data from the Marine Institute's North East Atlantic (NEATL) model was acquired and analysed. This model is an implementation of ROMS for a domain covering the Irish coastal and oceanic waters held by the Marine Institute [6]. It is a hindcast and forecast 3D physics model with a curvilinear grid. Grid size is 1200 x 750 x 40 km with a variable data resolution from 1.2 to 2km. It should be noted that the NEATL model is not specifically validated using in situ datasets for this site therefore currents should be interpreted with caution until in situ measured data is collected. Data from the model grid point closest to the centre of the site was downloaded and utilised (-8.0125°, 51.3625°).

Table 2-1 Wind and wave variables obtained from the ERA5 model

ERA5 code	Parameter	Metocean discipline	Units	Time frame	Temporal resolution (hours)	Data point
hmax	Maximum individual wave height	Wave	m	1979 – 2022	1	-8.0°, 51.5°
pp1d	Peak wave period	Wave	S	1979 – 2022	1	-8.0°, 51.5°
swh	Significant wave height of combined wind waves and swell	Wave	m	1979 – 2022	1	-8.0°, 51.5°
mwd	Mean wave direction	Wave	degrees	1979 – 2022	1	-8.0°, 51.5°
u10	10 m u-component of wind	Wind	m/s	1979 – 2022	1	-8.25°, 51.5°
v10	10 m v-component of wind	Wind	m/s	1979 – 2022	1	-8.25°, 51.5°
u100	10 m u-component of wind	Wind	m/s	1979 – 2022	1	-8.25°, 51.5°
v100	10 m v-component of wind	Wind	m/s	1979 – 2022	1	-8.25°, 51.5°

Table 2-2 Parameters utilised from the NEATL model

Parameter	Units	Time frame	Temporal resolution (hours)
Surface elevation	m	2012 – 2017	3
		2017 –2023	1
Bottom-water u component	m/s	2012 – 2017	3
		2017 – 2023	1
Bottom-water v component	m/s	2012 – 2017	3
		2017 – 2023	1
Mid-water u component	m/s	2012 – 2017	3
		2017 – 2023	1
Mid-water v component	m/s	2012 – 2017	3
		2017 – 2023	1
Surface-water u component	m/s	2012 – 2017	3
		2017 – 2023	1
Surface-water v component	m/s	2012 – 2017	3
		2017 – 2023	1

The Kinsale Energy Alpha Platform provided wind and wave data, is located approximately 58km from Cork Harbour. Wind measurements date back to 1979 but include notable periods of insufficient data. This wind data was recorded using a weather station that had the following heights on the platform, as provided by Met Éireann;

- 1. From 1979 and 20 January 2017 measurements were recorded at an elevation of 49.5 mLAT
- 2. Since January 2017 measurements were recorded at 66.3 mLAT.

These heights were used to scale the wind speeds to the required 10 and 100 mLAT altitudes for subsequent analysis.

The wave measurements were taken using a downward-pointing radar instrument attached to the Alpha platform. The data recording duration ranged between 1997 and 2018. The measurements were taken as the distance between the gauge and the sea surface. From these measurements wave and water level characteristics can be determined. This data collection technique is unable to provide wave directionality, therefore mean wave direction data from the ERA5 model is supplemented to support the analysis in this project.

Due to instrument malfunctions and various maintenance activities, there are periods where no measurements were recorded. These data gaps can be seen in Table 2-3.

Table 2-3 – Kinsale Energy Alpha Platform Data availability

Year	Interval	Timest amps	Wind Speed	Wind Dir	Wind Gust	Wind GDir	Pressure	Air Temp	Hs	Тр	Hmax	Wave Dir
1979	1 hour	22.4%	22.3%	22.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	1 hour	59.9%	59.9%	59.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	1 hour	60.0%	59.7%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	1 hour	69.6%	65.0%	34.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	1 hour	21.4%	21.4%	20.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	1 hour	89.7%	89.7%	89.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	1 hour	73.9%	73.9%	73.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	1 hour	95.1%	95.1%	95.0%	0.0%	0.0%	0.0%	95.0%	0.0%	0.0%	0.0%	0.0%
1987	1 hour	99.4%	99.4%	97.3%	0.0%	0.0%	0.0%	99.3%	0.0%	0.0%	0.0%	0.0%
1988	1 hour	98.9%	98.9%	98.9%	0.0%	0.0%	0.0%	98.6%	0.0%	0.0%	0.0%	0.0%
1989	1 hour	98.7%	98.7%	98.7%	0.0%	0.0%	0.0%	91.1%	0.0%	0.0%	0.0%	0.0%
1990	1 hour	7.9%	7.9%	7.9%	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%
1991		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1992		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1993	20 min	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	14.9%	9.5%	9.5%	9.4%	0.0%
1994		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1995	20 min	41.8%	41.8%	41.8%	41.8%	41.8%	41.8%	41.8%	39.3%	39.3%	39.1%	0.0%
1996	20 min	78.7%	78.6%	78.7%	78.6%	78.6%	78.7%	78.7%	0.0%	0.0%	0.0%	0.0%
1997	20 min	83.4%	81.6%	81.8%	81.6%	81.6%	83.4%	83.4%	59.9%	56.6%	59.9%	0.0%
1998	20 min	72.3%	72.1%	72.2%	72.1%	72.1%	72.3%	72.3%	72.3%	67.8%	72.2%	0.0%
1999	20 min	87.3%	87.1%	87.2%	87.1%	87.1%	87.3%	87.3%	87.3%	82.2%	87.3%	0.0%
2000	20 min	97.7%	97.5%	97.7%	97.5%	97.5%	97.7%	97.7%	92.5%	88.5%	92.5%	0.0%
2001	10 min	87.7%	86.8%	87.0%	86.8%	86.8%	87.7%	87.7%	87.7%	87.7%	87.7%	0.0%
2002	10 min	92.3%	92.0%	92.0%	92.0%	92.0%	92.2%	92.2%	92.3%	92.3%	92.3%	0.0%
2003	10 min	92.4%	92.4%	92.4%	92.4%	92.4%	91.0%	92.4%	92.4%	92.4%	92.4%	0.0%
2004	10 min	92.6%	90.8%	90.8%	90.8%	90.8%	92.6%	92.6%	92.6%	92.6%	92.5%	0.0%
2005	10 min	91.4%	91.4%	91.4%	91.1%	91.1%	91.4%	91.4%	91.4%	91.4%	91.4%	0.0%
2006	10 min	86.8%	86.8%	86.8%	86.7%	44.1%	86.8%	86.8%	86.8%	86.8%	86.8%	0.0%
2007	10 min	79.1%	79.1%	79.1%	79.1%	0.0%	79.1%	79.1%	79.1%	79.1%	79.1%	0.0%
2008	10 min	78.5%	78.5%	78.5%	78.5%	0.0%	78.5%	78.5%	78.5%	78.5%	78.5%	0.0%
2009	10 min	86.2%	86.2%	86.2%	86.2%	0.0%	86.2%	81.9%	86.2%	86.2%	86.2%	0.0%
2010	10 min	95.2%	95.2%	95.2%	95.2%	0.0%	95.2%	90.6%	95.2%	95.2%	95.2%	0.0%
2011	10 min	92.9%	91.6%	91.7%	91.6%	0.0%	92.9%	84.9%	92.9%	92.9%	92.9%	0.0%
2012	10 min	94.6%	94.6%	94.6%	94.6%	0.0%	94.6%	92.3%	94.6%	94.6%	94.6%	0.0%
2013	10 min	87.0%	86.6%	86.6%	86.6%	0.0%	31.2%	81.2%	87.0%	87.0%	87.0%	0.0%
2014	10 min	97.5%	97.5%	97.5%	97.5%	0.0%	90.5%	93.5%	97.5%	97.5%	97.5%	0.0%
2015	10 min	98.9%	98.9%	98.9%	98.9%	0.0%	98.9%	98.9%	98.9%	98.9%	98.9%	0.0%
2016	10 min	98.8%	98.7%	69.2%	98.8%	0.0%	98.8%	98.8%	98.8%	98.8%	98.8%	0.0%
2017	10 min	98.2%	98.1%	92.9%	98.4%	0.0%	98.2%	98.2%	98.2%	98.2%	98.5%	0.0%
2018	10 min	98.5%	98.2%	98.5%	98.2%	0.0%	82.2%	98.5%	98.5%	98.5%	98.5%	0.0%

An evaluation of the level of agreement between the Alpha and ERA5 datasets was conducted to inform on gap filling adequacy and whether the numerical dataset is sufficiently reliable to fill these gaps. Scatter and QQ plots were prepared which compare the correlation of the Alpha and ERA5 datasets. It was determined that the ERA5 dataset could adequately be used for gap filling the Alpha wind speeds. For the significant wave height, the plots below show that the ERA5 dataset is satisfactory for gap filling purposes, however it should be noted that the ERA5 data generally underpredicts Hs values. However, the dataset generally displays a good fit and is deemed adequate for gap filling.

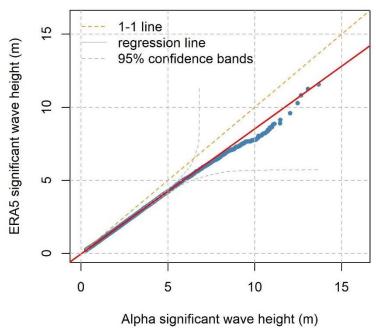


Figure 2-1 – Significant wave height QQ plot comparing measured and modelled dataset

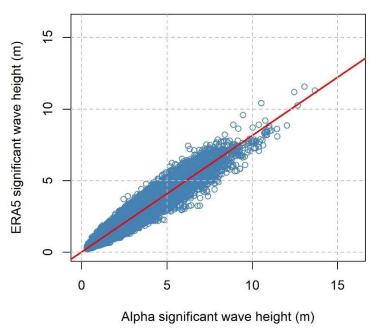


Figure 2-2 – Significant wave height scatter plot comparing measured and modelled dataset

For the peak wave period analysis revealed that the ERA5 dataset is inadequate for gap filling. Figure 2-3 presents the QQ plot for the peak wave period, it shows that the overall correlation is weak and therefore this parameter it is concluded that the numerical data could not be used to fill missing data in the Alpha dataset.

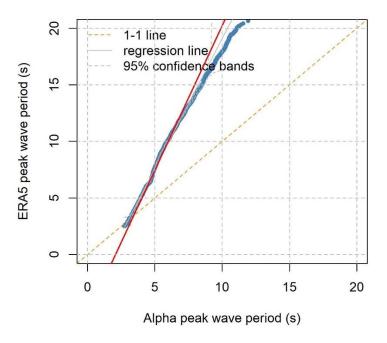


Figure 2-3 Peak wave period QQ plot comparing measured and modelled dataset

Given the poor correlation between the measured and modelled peak wave periods, an alternative approach related to gap filling has been adopted. This required relating a wave period associated with a Hs value that was more aligned to the Alpha data. Accordingly, relationships between Hs and Tp were examined through the wave steepness parameters (S) as outline in the equations below:

$$S = \frac{H_s}{L} = \frac{H_s}{1.56T_p^2}$$

where

$$T_P = \sqrt{\frac{H_S}{1.56S}}$$

S values equal to 1/15, 1/20, and 1/25 are common for wave conditions and were chosen to assess their suitability for filling. QQ plots were prepared to understand how these steepness' compared to the measured peak wave period steepness.

The 1/15 wave steepness was selected as the best fit considering the distribution of data points with respect to Hs and Tp. As can be seen in Figure 2-5 (a), the best fit was provided by the 1/15 steepness ratio for gap filling, subplot (a) shows the least distortion throughout a wider range of enclosing contours and wave parameters when compared with the other wave steepness used to fill Tp.

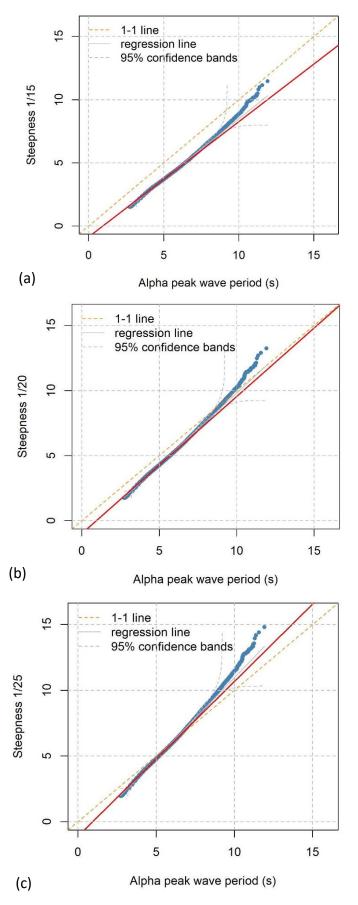


Figure 2-4 – Alpha peak wave period vs calculated steepness – QQ plot; (a) 1/15, (b) 1/20, (c) 1/25

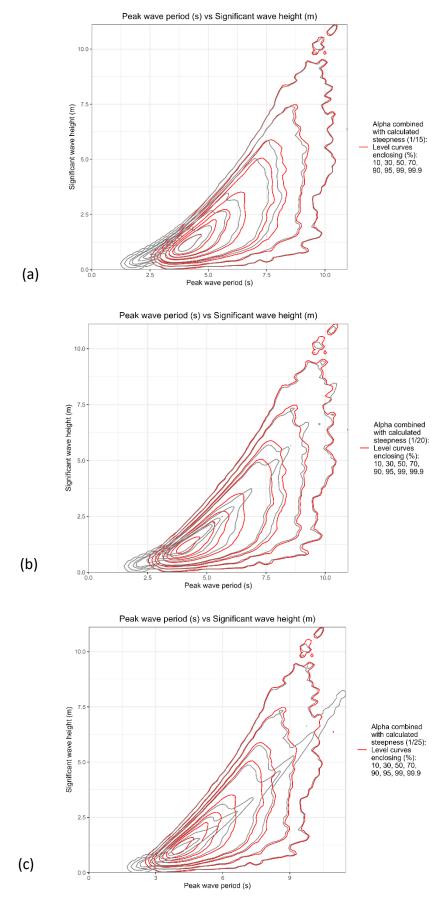


Figure 2-5 – Incident Hs and Tp contour plots, comparison between gap filled Tp using various steepness parameters and original dataset; Steepness (a) 1/15, (b) 1/20, (c) 1/25

### 3 Preliminary Metocean Site Conditions Assessment

#### 3.1 Water Levels

A 12-year time series of water levels was extracted from the three-dimensional North East Atlantic Model, an implementation of the ROMS model for Irish Waters [6]. The full dataset was interpolated to a 1-hour time series. This time series underwent tidal harmonic analysis to separate the tidal and non-tidal (residual) components. A representative spring-neap cycle of this water level time series is presented in Figure 3-1, while the statistics of the full dataset are presented in Table 3-1

Extreme positive and negative surge values were calculated from this 12-year modelled dataset. A generalised extreme value (GEV) methodology was chosen as the best-fitting analysis to calculate the extreme surge values for this location. A peaks-over-threshold approach was chosen to extract discrete extreme events over the 12-year time period as input into the general extreme value analysis. Long-term global sea level rise is given by the Intergovernmental Panel on Climate Change (IPCC) Synthesis Report 2014 [7]. A 30-year dataset was predicted using the tidal harmonic results, from which long-term water level parameters ranging from Highest Astronomical Tide (HAT) to Lowest Astronomical Tide (LAT) were produced. Design water level parameters, ranging from High Still Water Level (HSWL) to Low Still Water Level (LSWL) are presented in Table 3-2.

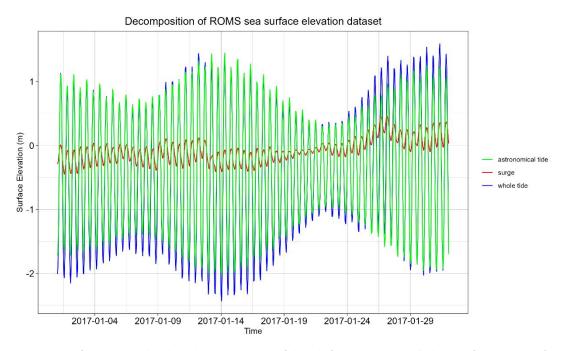


Figure 3-1 Separation of astronomical and residual components of the tide from NEATL modelled sea surface elevation from 2012 to 2023. Figure displays 2017 snapshot.

Table 3-1 Statistics of water levels

Component	Statistic	Water Level (mMSL)
	max	2.16
Total	min	-2.68
TOTAL	mean	-0.34
	standard deviation	0.96
	max	1.69
Tide	min	-2.39
ride	mean	-0.34
	standard deviation	0.94
	max	1.08
Residual	min	-0.66
	mean	0.00
	standard deviation	0.18

Table 3-2 Design Water Level

Parameter	Water Levels (mMSL)
High Still Water Level (50-year)	3.71
High Still Water Level (1-year)	2.64
Long-term Sea-Level Rise	0.63
Positive storm surge (50-year)	1.04
Positive storm surge (1-year)	0.61
Highest Astronomical Tide (HAT)	2.03
Mean High Water Spring (MHWS)	1.64
Mean High Water Neap (MHWN)	0.73
Mean Sea Level (MSL)	0.00
Mean Low Water Neap (MLWN)	-0.73
Mean Low Water Spring (MLWS)	-1.64
Lowest Astronomical Tide (LAT)	-2.05
Negative storm surge (1-year)	0.47
Negative storm surge (50-year)	0.80
Low Still Water Level (1-year)	-1.58
Low Still Water Level (50-year)	-1.25

### 3.2 Normal Wind Conditions

The ERA5 provides wind speed and direction values at heights of 10 and 100 m above sea level. The spatial resolution is  $0.25^{\circ}$  x  $0.25^{\circ}$  and temporal resolution is 1 hour. 10 and 100 m timeseries was downloaded at  $-8.25^{\circ}$ ,  $51.5^{\circ}$  for a 43-year period (1979 to 2022).

The modelled ERA5 dataset was used in conjunction with a 40-year measured dataset obtained from the Kinsale Energy Alpha Platform.

A 15 MW reference turbine is assumed. Based on the technical report produced by IEA Wind TCP Task 39 [8], hub height is therefore assumed to be 150 m. The ERA5 1-hour wind speeds at 100 m above sea level were extrapolated to hub height (150 m) using the power law with the shear exponent value 0.14 as recommended by IEC 61400-3-1: 2019 [9] for normal wind conditions:

$$V_{power\,law} = V_{ref} * \left(\frac{z}{z_{ref}}\right)^{\alpha}$$

Where  $V_{power\,law}$  and  $V_{ref}$  are the wind speeds at z and  $z_{ref}$  respectively, and  $\alpha$  is the shear exponent.

150 m and 10 m wind roses are displayed in Figure 3-2 and Figure 3-3 respectively. Monthly, annual and overall statistics of 150 m and 10 m wind speeds are presented in Table 3-3 to Table 3-6.

### Wind rose based on 1979 to 2022 dataset

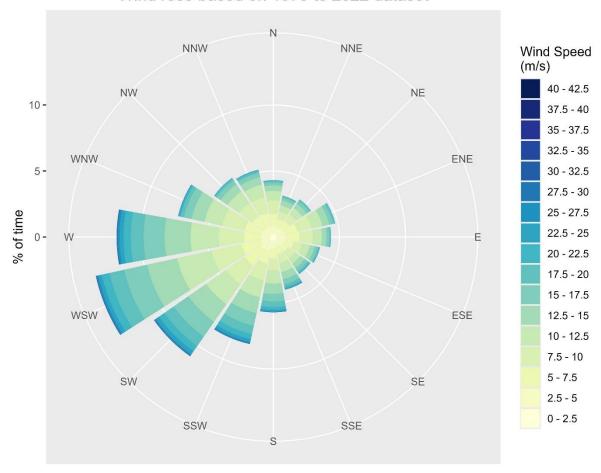


Figure 3-2 Rose plot of 1-hour averaged wind speed and direction at hub height (150 m) from 1979 to 2022 dataset

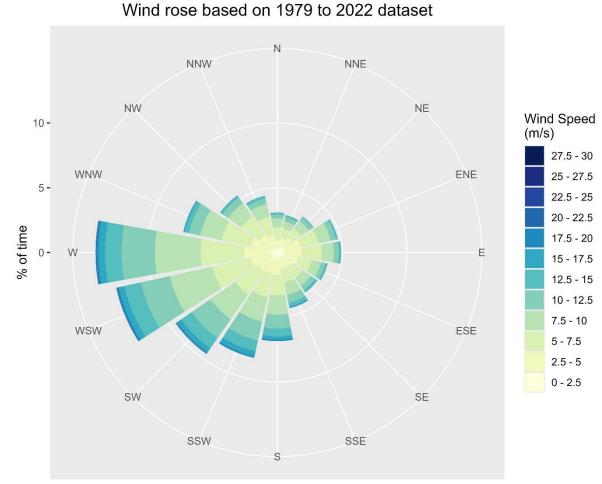
Table 3-3 Monthly wind statistics from ERA5 at 150 m hub height (1979 – 2022)

Data type	Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	mean	12.9	12.5	11.2	9.5	9.3	8.8	8.9	9.2	9.8	11.4	12.0	12.9
	median	12.6	12.0	10.8	9.1	8.9	8.4	8.6	8.9	9.4	10.9	11.7	12.5
wind	standard deviation	5.9	5.8	5.3	4.7	4.6	4.3	4.2	4.5	4.7	5.3	5.5	5.7
speed at hub	max	40.9	42.4	39.1	34.2	30.4	26.8	29.4	32.3	33.6	39.7	39.7	37.9
height	min	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
(m/s)	P25	8.4	8.2	7.2	6.0	5.9	5.4	5.8	5.9	6.4	7.5	7.8	8.7
	P50	12.6	12.0	10.8	9.1	8.9	8.4	8.6	8.9	9.4	10.9	11.7	12.5
	P75	16.9	16.3	14.8	12.4	12.4	11.6	11.7	12.0	12.7	14.8	15.6	16.6

	P90	20.8	20.4	18.5	15.8	15.6	14.6	14.5	15.0	16.2	18.5	19.2	20.4
	P95	23.2	22.9	20.4	18.1	17.5	16.6	16.2	17.0	18.3	20.6	21.5	22.8
wind direction (°)	mean	241.0	235.6	249.1	264.5	242.2	252.0	254.7	251.1	247.6	236.4	248.9	238.5

Table 3-4 Annual and overall wind statistics from ERA5 at 150 m hub height (1979 – 2022)

Year				win	d speed at	hub height (	m/s)				wind direction (°)
	mean	median	standard deviation	max	min	P25	P50	P75	P90	P95	mean
1979	10.7	10.1	5.0	31.8	0.2	7.2	10.1	13.8	17.4	19.5	252.6
1980	11.7	11.4	5.7	33.6	0.1	7.2	11.4	15.6	19.2	21.8	253.9
1981	11.3	10.4	5.9	39.7	0.4	7.1	10.4	15.0	19.2	22.2	249.4
1982	10.7	10.2	5.5	35.4	0.1	6.6	10.2	14.2	18.0	20.4	238.0
1983	9.9	9.3	5.0	27.3	0.1	6.1	9.3	13.1	16.6	18.8	247.0
1984	9.4	8.4	5.3	32.4	0.1	5.4	8.4	12.6	16.8	19.2	258.8
1985	10.5	10.2	5.1	32.4	0.1	6.7	10.2	13.8	17.4	19.8	235.5
1986	11.8	11.4	5.9	39.1	0.1	7.2	11.4	15.6	19.8	22.2	247.5
1987	10.5	10.2	5.2	30.6	0.1	6.6	10.2	13.8	17.4	19.3	244.1
1988	11.2	10.8	5.8	39.7	0.2	7.2	10.8	15.0	18.6	21.6	247.6
1989	11.2	10.8	5.8	37.9	0.4	7.2	10.8	15.0	19.2	21.6	240.9
1990	10.9	10.2	5.4	40.9	0.1	7.0	10.2	14.3	18.2	20.8	246.8
1991	10.1	9.7	5.0	34.1	0.1	6.4	9.7	13.1	17.0	19.6	240.8
1992	10.2	10.0	4.6	27.4	0.1	6.9	10.0	13.3	16.4	18.3	248.2
1993	10.1	9.7	4.9	32.3	0.1	6.6	9.7	13.0	16.5	19.3	247.9
1994	10.8	10.2	4.9	34.6	0.1	7.2	10.2	13.9	17.6	19.7	235.6
1995	10.0	9.5	5.0	31.3	0.1	6.3	9.5	12.8	16.9	19.5	242.4
1996	10.1	9.5	5.3	38.5	0.2	6.3	9.5	13.4	17.3	19.7	234.8
1997	10.4	9.9	5.3	36.0	0.0	6.4	9.9	13.6	17.6	20.0	225.8
1998	11.3	10.8	5.1	32.6	1.0	7.6	10.8	14.6	18.1	20.3	250.7
1999	11.5	11.2	5.3	30.6	0.4	7.4	11.2	15.0	18.8	21.0	252.6
2000	11.3	11.0	5.6	39.7	0.4	6.8	11.0	15.0	18.6	21.0	253.7
2001	10.4	10.1	5.2	29.2	0.9	6.4	10.1	13.8	17.3	19.6	254.3
2002	11.5	10.9	5.7	36.0	0.4	7.3	10.9	15.2	19.1	21.8	236.9
2003	10.7	10.5	5.0	36.2	1.1	7.0	10.5	14.0	17.0	19.3	230.8
2004	10.6	10.1	5.3	31.3	0.5	6.8	10.1	14.0	17.9	20.0	255.3
2005	10.7	10.2	5.2	31.8	0.7	6.8	10.2	14.0	17.7	19.8	252.2
2006	10.9	10.3	5.5	34.5	0.1	6.9	10.3	14.2	18.2	21.0	232.6
2007	10.5	9.7	5.6	36.5	0.3	6.3	9.7	14.0	18.3	21.0	252.7
2008	11.5	11.0	5.5	32.3	0.5	7.5	11.0	15.2	19.0	21.1	251.8
2009	11.0	10.5	5.4	35.4	0.5	7.0	10.5	14.5	18.2	20.6	238.6
2010	9.8	9.4	4.7	31.5	0.2	6.4	9.4	12.6	16.0	18.2	262.2
2011	11.0	10.5	5.3	28.0	0.3	7.1	10.5	14.6	18.0	20.3	239.1
2012	10.7	10.1	5.1	31.1	0.6	7.1	10.1	13.9	17.7	20.0	251.9
2013	10.8	10.1	5.3	35.6	0.6	7.0	10.1	13.9	17.9	20.4	242.0
2014	10.8	10.0	5.9	42.4	0.6	6.5	10.0	14.3	18.5	21.5	242.7
2015	11.4	10.6	5.7	31.7	0.6	7.2	10.6	14.8	19.4	22.3	240.6
2016	10.8	10.0	5.3	38.0	0.6	6.9	10.0	14.1	18.0	20.1	247.2
2017	10.4	10.1	5.0	33.2	0.6	6.7	10.1	13.5	16.9	19.1	253.6
2018	10.3	9.7	5.1	33.8	0.6	6.3	9.7	13.7	17.1	18.8	241.9
2019	10.0	9.7	4.8	28.0	0.3	6.3	9.7	13.3	16.7	18.6	242.2
2020	10.8	10.3	5.3	32.3	0.2	6.9	10.3	14.3	18.1	20.4	246.6
2021	9.4	9.0	4.8	35.3	0.2	5.9	9.0	12.2	15.9	18.4	240.8
Overall	10.7	10.2	5.3	42.4	0.0	6.7	10.2	14.0	17.9	20.3	245.5



# Figure 3-3 Rose plot of 1-hour averaged wind speed and direction near sea level (10 m) from 1979 to 2022 dataset

Table 3-5 Monthly wind statistics from combined modelled ERA5 and measured Alpha Platform at 10 m above sea level (1979 – 2022)

Data type	Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	mean	9.1	8.9	7.9	6.8	6.6	6.2	6.3	6.5	7.0	8.1	8.5	9.1
	median	9.0	8.6	7.6	6.5	6.3	6.0	6.2	6.3	6.7	7.8	8.3	8.8
	standard deviation	4.1	4.1	3.7	3.3	3.2	3.0	2.9	3.1	3.3	3.7	3.8	3.9
wind speed at	max	28.0	29.0	26.7	23.4	21.7	18.4	20.2	22.9	23.0	27.1	27.2	26.0
10 m above	min	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0
sea level (m/s)	P25	6.1	5.8	5.1	4.3	4.2	3.9	4.1	4.2	4.6	5.4	5.7	6.3
	P50	9.0	8.6	7.6	6.5	6.3	6.0	6.2	6.3	6.7	7.8	8.3	8.8
	P75	11.9	11.6	10.6	8.8	8.6	8.2	8.2	8.5	9.0	10.5	11.1	11.7
	P90	14.5	14.3	13.0	11.2	10.9	10.3	10.1	10.6	11.3	12.9	13.6	14.4
	P95	16.1	16.1	14.4	12.7	12.3	11.5	11.2	11.9	12.7	14.4	15.0	16.0
wind direction (°)	mean	235.3	230.1	244.0	249.9	235.6	251.6	253.9	248.9	245.6	232.4	244.1	235.4

Table 3-6 Annual and overall wind statistics from combined modelled ERA5 and measured Alpha Platform at 10 m above sea level (1979-2022)

Year			wind speed at 10	m above	e sea le	evel (m	ı/s)				wind direction (°)
	mean	median	standard deviation	max	min	P25	P50	P75	P90	P95	mean
1979	8.0	7.7	3.5	21.8	0.2	5.6	7.7	10.3	12.7	14.2	257.5
1980	8.3	8.2	3.8	23.0	0.0	5.3	8.2	10.8	13.4	15.2	259.7
1981	8.1	7.8	4.0	27.1	0.2	5.2	7.8	10.7	13.6	15.6	260.8
1982	7.7	7.4	4.0	24.3	0.0	4.5	7.4	10.3	13.2	14.8	245.1
1983	7.4	7.0	3.6	20.2	0.1	4.7	7.0	9.7	12.4	13.9	248.4
1984	6.5	5.8	3.7	22.2	0.1	3.7	5.8	8.6	11.5	13.6	254.2
1985	7.4	7.1	3.5	22.2	0.2	4.9	7.1	9.7	12.0	13.6	231.9
1986	8.1	7.8	4.0	26.7	0.4	4.9	7.8	10.7	13.6	15.2	242.9
1987	7.2	7.0	3.6	21.0	0.1	4.5	7.0	9.5	11.9	13.2	235.3
1988	7.7	7.4	4.0	27.1	0.2	4.9	7.4	10.3	12.7	14.8	242.8
1989	7.7	7.4	3.9	25.9	0.4	4.9	7.4	10.3	13.2	14.8	228.7
1990	8.4	8.0	3.8	28.0	0.0	5.6	8.0	10.7	13.5	15.2	248.1
1991	7.7	7.4	3.7	24.5	0.1	5.1	7.4	9.9	12.8	14.6	244.0
1992	7.8	7.8	3.3	19.8	0.0	5.6	7.8	10.1	12.2	13.5	251.7
1993	7.7	7.5	3.5	22.9	0.1	5.2	7.5	9.7	12.3	14.0	245.6
1994	8.2	7.9	3.5	24.6	0.1	5.7	7.9	10.5	13.1	14.5	238.5
1995	7.2	6.9	3.6	22.4	0.2	4.7	6.9	9.3	12.2	13.9	239.8
1996	6.9	6.6	3.7	26.4	0.2	4.3	6.6	9.2	11.9	13.5	222.0
1997	7.2	6.9	3.7	24.8	0.2	4.5	6.9	9.5	12.1	13.8	215.9
1998	7.9	7.5	3.6	22.3	0.3	5.3	7.5	10.1	12.7	14.3	244.4
1999	7.9	7.7	3.7	21.0	0.4	5.2	7.7	10.3	13.0	14.4	245.2
2000	7.8	7.7	3.9	27.2	0.4	4.7	7.7	10.4	12.9	14.5	246.6
2001	7.1	6.9	3.6	20.0	0.7	4.4	6.9	9.5	11.9	13.4	242.1
2002	7.9	7.5	3.9	24.6	0.6	5.0	7.5	10.4	13.1	15.0	230.4
2003	7.3	7.2	3.4	24.8	0.8	4.8	7.2	9.6	11.7	13.2	219.5
2004	7.3	6.9	3.6	21.4	0.3	4.7	6.9	9.6	12.2	13.7	246.6
2005	7.3	7.0	3.6	21.7	0.6	4.6	7.0	9.6	12.1	13.6	239.7
2006	7.5	7.1	3.8	23.6	0.1	4.8	7.1	9.7	12.5	14.4	219.8
2007	7.3	6.9	3.8	25.0	0.1	4.5	6.9	9.7	12.6	14.4	239.3
2008	7.9	7.6	3.7	22.1	0.2	5.2	7.6	10.5	13.0	14.5	244.5
2009	7.6	7.2	3.7	24.3	0.4	4.9	7.2	10.0	12.5	14.1	232.8
2010	6.7	6.5	3.2	21.6	0.4	4.4	6.5	8.6	11.0	12.5	243.1
2011	7.6	7.3	3.6	19.2	0.3	4.9	7.3	10.0	12.4	13.9	234.6
2012	7.3	6.9	3.5	21.3	0.4	4.8	6.9	9.5	12.1	13.7	246.1
2013	7.5	7.1	3.6	24.4	0.4	4.9	7.1	9.6	12.3	14.0	239.6
2014	7.4	6.9	4.0	29.0	0.4	4.5	6.9	9.8	12.7	14.7	245.7
2015	7.8	7.3	3.9	21.7	0.4	4.9	7.3	10.1	13.3	15.3	241.0
2016	7.4	6.9	3.6	26.0	0.4	4.7	6.9	9.7	12.3	13.8	241.3
2017	7.1	6.9	3.4	22.7	0.4	4.6	6.9	9.2	11.6	13.1	241.7
2018	7.0	6.6	3.5	23.2	0.4	4.3	6.6	9.4	11.7	13.0	225.2
2019	7.8	7.5	3.5	20.5	0.1	5.0	7.5	10.2	12.5	13.9	246.1
2020	8.3	7.9	3.9	22.9	0.0	5.5	7.9	11.0	13.6	15.1	250.2
2021	7.3	7.1	3.5	25.5	0.1	4.7	7.1	9.4	12.0	13.6	245.6
Overall	7.6	7.2	3.7	29.0	0.0	4.9	7.2	9.9	12.6	14.2	241.6

### 3.3 Weibull Parameters

Weibull parameters for normal wind speeds have been calculated for the omni-directional conditions for both wind speeds at 10 m and 150 m above sea level. The Weibull scale (A) and shape (k) parameters fitted to the omni-directional wind data are given in Table 3-7, Figure 3-4 and Figure 3-5.

Wind speed height above sea level (m)	Weibull p	arameters
	Scale (A)	Shape (k)
10	8.54	2.15
150	12.02	2.10

Table 3-7 Weibull fit parameters for wind speed 10mMSL and 150mMSL

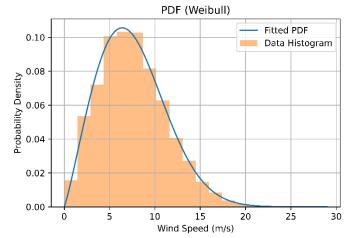


Figure 3-4 Histogram and Weibull fit parameters for wind speed 10 mMSL

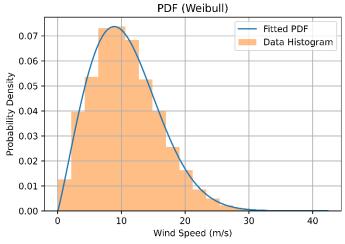


Figure 3-5 Histogram and Weibull fit parameters for wind speed 150 mMSL

#### 3.4 Extreme Wind Conditions

The ERA5 dataset was used to calculate 10-minute extreme wind speeds at hub height. A Generalised Extreme Value (GEV) methodology was chosen as the best-fitting analysis to calculate the extreme values for wind speed at this location. Due to the adequate length of the wind dataset, the block maxima (annual maxima) approach was chosen to extract extreme events over the 43-year time period as input into the GEV analysis. The 1-hour averaged wind speed dataset at 100 m above sea level was used as an input to predict 1-, 50- and 100-year return values.

The predicted 1-hour extreme wind speeds at 100 m above sea level were converted to 10-minute extreme wind speeds using the Frøya wind speed profile which is documented in DNVGL-RP-C205: 2021 [10]:

$$U(T,z) = U_0 \cdot \left\{ 1 + C \cdot \ln \frac{z}{H} \right\} \cdot \left\{ 1 - 0.41 \cdot I_U(z) \cdot \ln \frac{T}{T_0} \right\}$$

Where  $U_0$  represents the 1-hr mean wind speed at height H above the sea level (100 m) to the mean wind speed U with averaging period T at height z above the sea level.  $T_0$  is fixed at 3600 s. The expression for C is given as:

$$C = 5.73 \times 10^{-2} \sqrt{1 + 0.148 U_0}$$

and

$$I_U = 0.06. (1 + 0.043 U_0). \left(\frac{z}{H}\right)^{-0.22}$$

These 10-minute extreme wind speeds at 100 m above sea level were extrapolated to hub height (150 m) using the power law (IEC 61400-3-1: 2019) with the shear exponent value 0.11 as recommended by IEC 61400-3-1: 2019 [9] for extreme conditions:

$$V_{power\,law} = V_{ref} * \left(\frac{z}{z_{ref}}\right)^{\alpha}$$

Where  $V_{power\ law}$  and  $V_{ref}$  are the wind speeds at z and  $z_{ref}$  respectively, and  $\alpha$  is the shear exponent.

The final 1-year, 50-year, and 100-year return values are presented in Table 3-8.

Table 3-8 Extreme wind speeds

Height above	Averaging	Extreme wind speed (m/s)								
sea level (m)	period	1-Year	50-Year	100-Year						
100	1-hour	21.8	39.8	40.9						
100	10-min	23.7	44.6	45.9						
150	10-min	25.1	47.4	48.8						

#### Return values in the GEV model

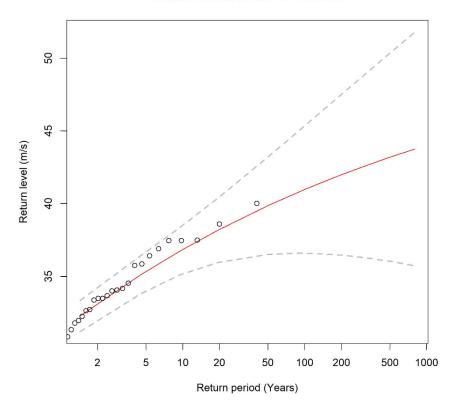


Figure 3-6 Return values of wind speed (1-hour, m/s) at 100 m above sea level in the GEV model. Red curve represents the best fit with the data and aligns with the input data. Dashed lines represent the 95 % confidence intervals. Distribution parameters: location = 31.164; scale = 2.823; shape = -0.0771.

#### 3.5 Normal Sea States

For normal sea states, the metocean database is analysed to establish the long-term joint probability distribution of the following parameters:

- Mean wind speed at hub height,  $V_{huh}$
- Significant wave height, H<sub>s</sub>
- Peak wave period,  $T_p$

According to IEC 61400-3-1: 2019 [9], a 1-hour averaging period is required for the establishment of the long-term joint probability distribution of  $V_{hub}$ ,  $H_s$  and  $T_p$  under NSS. The wind and wave data are subsequently gathered in bins. The  $V_{hub}$  bins cover 2 m/s, the  $H_s$  bins cover 0.5 m and the  $T_p$  bins span 0.5 s (IEC 61400-3-1: 2019). The binning of the  $V_{hub}$  data is done in such a way that the wind speed bin corresponding to for example  $V_{hub} = 2 \ m/s$  contains all wind speed observations ranging from  $\geq 1 \ m/s$  to  $< 3 \ m/s$ . The bin  $H_s = 2 \ m$  contains all wave height observations between  $\geq 1.75 \ m$  and  $< 2.25 \ m$ , while the bin  $T_p = 2 \ s$  includes all wave period observations from  $\geq 1.75 \ s$  to  $< 2.25 \ s$ . Subsequently, the occurrence of all combinations of  $V_{hub}$ ,  $H_s$  and  $T_p$  is counted. The data is gathered per wind speed bin and entered in a scatter diagram giving the frequency of occurrences of each combination of  $H_s$  and  $T_p$  for that wind speed bin as a percentage value. The full set of scatter diagrams make up the 3-D scatter diagram. The  $H_s/T_p$  scatter diagram for all wind speeds (Figure 0-1) and the full set of 3D scatter diagrams are available in the Appendix.

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The data is gathered per wind speed bin and entered in a scatter diagram giving the frequency of occurrences of each combination of  $H_s$  and  $T_p$  for that wind speed bin as a percentage value. The full set of scatter diagrams make up the 3-D scatter diagram. From each scatter plot, the most probable  $H_s/T_p$  bin was identified. The average  $H_s$  and  $T_p$  bin was then calculated and assigned to each  $V_{hub}$ . The reduced (lumped) scatter is shown in Table 3-9.

Table 3-9 Lumped scatter diagram of the given offshore site

Vhub (m/s)	Hs (m)	Tp (s)	Wave direction (°)	Wind direction (°)	Frequency of Occurrence (%)
2	0.62	2.45	247.50	213.75	0.04
4	0.95	5.01	247.50	225.00	0.34
6	0.98	5.01	247.50	225.00	0.67
8	0.99	4.50	247.50	236.25	1.03
10	0.99	4.01	236.25	236.25	1.71
12	1.06	3.99	236.25	247.50	1.58
14	1.50	4.50	236.25	247.50	1.50
16	1.99	5.01	236.25	247.50	1.13
18	2.03	4.99	236.25	258.75	0.77
20	2.47	5.04	236.25	258.75	0.55
22	2.99	5.52	236.25	258.75	0.34
24	3.51	5.99	236.25	258.75	0.24
26	4.99	7.01	225.00	270.00	0.11
28	5.00	7.00	236.25	270.00	0.07
30	5.96	7.53	247.50	270.00	0.03
32	6.54	7.91	213.75	270.00	0.01
34	7.04	7.98	247.50	247.50	0.00
36	7.05	8.00	247.50	258.75	0.00
42	10.06	9.57	236.25	258.75	0.00

A rose plot displaying wave direction and significant wave height is presented in Figure 3-7, whereby monthly, annual and overall wave summary statistics are given in Table 3-10 to Table 3-13.

Kernel density and contour plots of significant wave height and peak wave period are presented in Figure 3-8 and Figure 3-9.

#### NNW NNE Significant wave height (m) NW NE 20 -13 - 14 12 - 13 WNW ENE 11 - 12 10 -10 - 11 9 - 10 % of time 8 - 9 Ε 6 - 7 5 - 6 4 - 5 WSW ESE 3 - 4 2 - 3 1 - 2 SW SE 0 - 1 SSW SSE S

### Wave rose based on 1997 to 2022 dataset

Figure 3-7 Rose plot of significant wave height and wave direction from 1997 to 2022 dataset

Table 3-10 Monthly wave statistics from combined measured and modelled ERA5 datasets (1997 – 2022)

Variable	Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	mean	2.8	2.7	2.1	1.7	1.6	1.4	1.3	1.4	1.6	2.1	2.3	2.7
	median	2.5	2.4	1.9	1.5	1.3	1.2	1.1	1.2	1.4	1.9	2.0	2.5
	standard deviation	1.4	1.4	1.1	1.0	0.9	0.7	0.7	0.7	0.9	1.1	1.2	1.3
	max	10.4	12.0	8.9	9.3	8.1	5.6	4.7	7.3	7.6	13.7	9.4	10.5
Hs (m)	min	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.4	0.4	0.5
	P25	1.7	1.7	1.3	1.0	1.0	0.8	0.8	0.9	1.0	1.3	1.4	1.7
	P50	2.5	2.4	1.9	1.5	1.3	1.2	1.1	1.2	1.4	1.9	2.0	2.5
	P75	3.6	3.4	2.8	2.2	2.0	1.8	1.6	1.7	2.0	2.6	3.0	3.5
	P90	4.7	4.5	3.7	3.0	2.6	2.4	2.2	2.3	2.7	3.5	4.1	4.6
	P95	5.4	5.2	4.2	3.5	3.2	2.8	2.6	2.8	3.2	4.1	4.7	5.3
	mean	4.5	4.4	3.5	2.8	2.6	2.3	2.2	2.3	2.7	3.5	3.8	4.5
	median	4.1	3.9	3.1	2.5	2.3	2.1	1.9	2.0	2.3	3.1	3.3	4.1
	standard deviation	2.2	2.3	1.8	1.5	1.4	1.2	1.1	1.2	1.4	1.8	2.0	2.2
Hmax (m)	max	17.8	22.9	13.7	14.5	15.1	10.1	8.6	11.2	12.3	23.4	16.0	19.3
	min	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.8	0.8	0.9
	P25	2.8	2.7	2.1	1.8	1.6	1.5	1.4	1.5	1.7	2.2	2.3	2.8
	P50	4.1	3.9	3.1	2.5	2.3	2.1	1.9	2.0	2.3	3.1	3.3	4.1

	P75	5.8	5.6	4.5	3.5	3.2	3.0	2.7	2.9	3.3	4.3	4.8	5.7
	P90	7.6	7.5	6.0	4.8	4.3	3.9	3.7	3.9	4.4	5.7	6.6	7.6
	P95	8.7	8.8	6.9	5.7	5.2	4.5	4.3	4.6	5.2	6.8	7.7	8.7
	mean	6.0	6.0	5.6	5.0	4.8	4.6	4.4	4.4	4.8	5.3	5.5	5.9
	median	6.1	6.0	5.6	4.9	4.7	4.5	4.4	4.4	4.7	5.2	5.4	5.8
	standard deviation	1.5	1.4	1.4	1.4	1.2	1.2	1.1	1.1	1.3	1.3	1.4	1.4
	max	10.6	11.9	10.6	9.8	10.2	8.6	9.3	9.5	11.2	11.1	11.1	11.3
Tp (s)	min	2.0	2.2	1.9	1.7	1.7	1.8	1.5	1.7	1.5	2.1	2.0	2.1
	P25	5.0	5.0	4.6	3.9	4.0	3.8	3.7	3.8	3.9	4.3	4.5	4.9
	P50	6.1	6.0	5.6	4.9	4.7	4.5	4.4	4.4	4.7	5.2	5.4	5.8
	P75	7.1	7.0	6.5	6.0	5.5	5.4	5.0	5.1	5.6	6.1	6.5	6.8
	P90	7.9	7.8	7.3	6.8	6.3	6.1	5.7	5.8	6.5	7.0	7.3	7.7
	P95	8.3	8.4	7.8	7.2	6.8	6.5	6.1	6.2	7.0	7.5	7.8	8.2
Wave direction (°)	mean	213.0	217.1	212.6	203.6	209.2	217.3	229.2	226.7	217.1	209.2	221.1	217.8

 $Table \ 3-11 \ Annual \ and \ overall \ significant \ wave \ height \ (Hs) \ from \ combined \ measured \ and \ ERA5 \ dataset \ (1997-2022)$ 

Year				Hs (m)						
	mean	median	standard deviation	max	min	P25	P50	P75	P90	P95
1997	1.8	1.5	1.1	8.6	0.4	1.0	1.5	2.2	3.3	4.1
1998	2.0	1.8	1.2	8.4	0.3	1.1	1.8	2.6	3.8	4.5
1999	2.0	1.7	1.2	8.1	0.3	1.2	1.7	2.6	3.7	4.4
2000	2.0	1.7	1.2	8.7	0.3	1.1	1.7	2.5	3.6	4.3
2001	1.9	1.6	1.1	9.5	0.3	1.1	1.6	2.4	3.4	4.1
2002	2.3	2.0	1.4	8.7	0.3	1.2	2.0	3.0	4.3	5.1
2003	2.0	1.8	1.1	8.8	0.3	1.2	1.8	2.5	3.4	4.1
2004	1.9	1.7	1.1	9.2	0.3	1.1	1.7	2.5	3.4	4.2
2005	1.9	1.5	1.1	8.5	0.3	1.1	1.5	2.4	3.3	4.0
2006	2.1	1.7	1.3	9.3	0.3	1.1	1.7	2.6	3.8	4.7
2007	1.9	1.5	1.3	10.4	0.2	1.0	1.5	2.5	3.8	4.8
2008	2.0	1.8	1.1	8.9	0.3	1.2	1.8	2.7	3.6	4.2
2009	2.1	1.8	1.2	8.0	0.4	1.2	1.8	2.7	3.8	4.5
2010	1.8	1.5	1.0	8.0	0.4	1.1	1.5	2.2	3.1	3.6
2011	2.1	1.8	1.1	7.2	0.4	1.2	1.8	2.7	3.7	4.3
2012	1.9	1.7	1.0	7.6	0.4	1.2	1.7	2.3	3.2	3.9
2013	2.1	1.7	1.3	10.5	0.3	1.1	1.7	2.6	3.8	4.7
2014	2.2	1.8	1.5	12.0	0.3	1.1	1.8	2.8	4.0	4.9
2015	2.2	1.9	1.3	9.0	0.3	1.2	1.9	3.0	4.2	5.0
2016	2.0	1.8	1.2	10.7	0.4	1.2	1.8	2.6	3.6	4.3
2017	2.0	1.7	1.1	13.7	0.4	1.1	1.7	2.5	3.3	4.0
2018	2.1	1.8	1.3	9.4	0.4	1.2	1.8	2.8	3.9	4.6
2019	1.7	1.5	1.0	5.9	0.4	1.0	1.5	2.3	3.2	3.7
2020	1.8	1.5	1.2	6.7	0.3	1.0	1.5	2.5	3.4	4.1
2021	1.6	1.3	1.1	8.2	0.2	0.9	1.3	2.0	3.0	3.8
Overall	2.0	1.7	1.2	13.7	0.2	1.1	1.7	2.5	3.6	4.3

Table 3-12 Annual and overall individual maximum wave height (Hmax) from combined measured and ERA5 dataset (1997 – 2022)

Year			Hr	nax (m	)					
	mean	median	standard deviation	max	min	P25	P50	P75	P90	P95
1997	3.3	2.8	2.1	16.3	0.7	1.9	2.8	4.2	6.2	7.7
1998	3.3	2.8	2.0	14.5	0.4	1.8	2.8	4.2	6.0	7.4
1999	3.2	2.7	1.9	13.0	0.5	1.9	2.7	4.0	5.7	7.0
2000	3.2	2.7	2.0	16.0	0.5	1.7	2.7	4.0	5.7	7.1
2001	2.9	2.5	1.7	14.3	0.6	1.8	2.5	3.7	5.2	6.3
2002	3.5	3.1	2.1	12.7	0.7	1.9	3.1	4.6	6.5	7.7
2003	3.0	2.7	1.6	12.9	0.6	1.8	2.7	3.7	5.1	6.2
2004	3.0	2.5	1.7	13.7	0.7	1.7	2.5	3.7	5.2	6.5
2005	2.9	2.4	1.6	12.9	0.7	1.7	2.4	3.6	5.1	6.0
2006	3.3	2.8	2.0	19.3	0.6	1.9	2.8	4.1	5.9	7.4
2007	3.2	2.6	2.1	15.7	0.4	1.8	2.6	4.1	6.1	7.7
2008	3.4	3.0	1.8	13.6	0.7	2.0	3.0	4.4	5.8	6.8
2009	3.5	3.0	1.9	14.0	0.9	2.1	3.0	4.4	6.1	7.3
2010	2.9	2.5	1.5	13.0	0.9	1.9	2.5	3.5	4.9	5.9
2011	3.4	2.9	1.8	12.8	0.9	2.1	2.9	4.4	5.9	7.1
2012	3.2	2.8	1.6	12.0	0.9	2.1	2.8	3.8	5.2	6.3
2013	3.4	2.8	2.1	17.2	0.5	1.9	2.8	4.2	6.2	7.6
2014	3.5	2.8	2.3	22.9	0.6	1.8	2.8	4.5	6.4	7.6
2015	3.6	3.0	2.1	14.5	0.6	2.0	3.0	4.7	6.7	7.9
2016	3.3	2.8	1.8	17.4	0.8	2.0	2.8	4.2	5.6	6.8
2017	3.1	2.8	1.8	23.4	0.7	1.9	2.8	4.0	5.3	6.3
2018	3.4	3.0	2.0	14.8	0.7	1.9	3.0	4.5	6.2	7.3
2019	3.3	2.9	1.8	11.3	0.7	1.9	2.9	4.3	6.0	7.0
2020	3.5	2.8	2.2	12.9	0.6	1.9	2.8	4.7	6.5	7.7
2021	3.0	2.4	2.0	15.6	0.5	1.6	2.4	3.8	5.7	7.1
Overall	3.3	2.8	1.9	23.4	0.4	1.9	2.8	4.1	5.8	7.1

Table 3-13 Annual and overall peak wave period (Tp) and wave direction from combined measured and ERA5 dataset (1997 – 2022)

Year			Wave direction (°)								
	mean	median	standard deviation	max	min	P25	P50	P75	P90	P95	mean
1997	3.8	1.2	9.1	1.8	3.1	3.8	4.6	5.6	6.2	3.8	1.2
1998	5.4	1.5	11.3	1.7	4.5	5.4	6.5	7.6	8.3	5.4	1.5
1999	5.7	1.4	11.2	2.4	4.8	5.7	6.8	7.7	8.3	5.7	1.4
2000	5.5	1.2	11.1	2.4	4.8	5.5	6.4	7.2	7.8	5.5	1.2
2001	5.0	1.2	9.5	2.4	4.3	5.0	6.0	6.8	7.4	5.0	1.2
2002	5.4	1.4	10.3	1.8	4.4	5.4	6.5	7.4	8.0	5.4	1.4
2003	5.1	1.2	10.5	1.9	4.4	5.1	5.9	6.8	7.5	5.1	1.2
2004	5.0	1.2	9.4	1.9	4.2	5.0	6.0	6.9	7.3	5.0	1.2
2005	4.9	1.1	9.4	2.6	4.1	4.9	5.8	6.7	7.1	4.9	1.1
2006	5.2	1.3	10.0	1.9	4.3	5.2	6.2	7.1	7.7	5.2	1.3
2007	5.0	1.6	11.9	1.5	3.9	5.0	6.2	7.4	7.9	5.0	1.6
2008	5.2	1.2	10.5	1.8	4.4	5.2	6.2	7.0	7.4	5.2	1.2
2009	5.5	1.3	10.4	2.2	4.5	5.5	6.5	7.3	8.0	5.5	1.3
2010	5.0	1.2	9.7	2.3	4.3	5.0	6.0	7.1	7.6	5.0	1.2
2011	5.4	1.3	10.9	2.7	4.6	5.4	6.4	7.3	7.8	5.4	1.3
2012	5.2	1.1	9.6	2.5	4.6	5.2	6.0	6.9	7.3	5.2	1.1
2013	5.2	1.5	9.9	1.6	4.3	5.2	6.4	7.4	7.9	5.2	1.5
2014	5.5	1.4	10.6	2.1	4.4	5.5	6.6	7.6	8.2	5.5	1.4
2015	5.5	1.3	10.6	2.8	4.6	5.5	6.6	7.4	7.9	5.5	1.3
2016	5.4	1.2	10.1	2.8	4.6	5.4	6.4	7.2	7.7	5.4	1.2
2017	5.3	1.2	10.9	2.1	4.5	5.3	6.2	7.0	7.5	5.3	1.2
2018	5.6	1.3	11.1	2.3	4.6	5.6	6.6	7.5	7.9	5.6	1.3
2019	3.8	1.1	7.5	1.9	3.1	3.8	4.7	5.5	6.0	3.8	1.1
2020	3.8	1.3	8.0	1.7	3.1	3.8	4.9	5.8	6.3	3.8	1.3
2021	3.5	1.2	8.9	1.5	2.9	3.5	4.4	5.4	6.0	3.5	1.2
Overall	5.1	1.4	11.9	1.5	4.2	5.1	6.1	7.1	7.7	5.1	1.4

As can be seen in Figure 3-8, some bias is introduced due to the method of gap filling the Tp using the steepness parameter. The method assumes that the Tp follows specific steepness trend associate with the Hs at a given instance, the narrow strip of filled values can be seen in the plot spanning along a range of Hs values. The authors acknowledge that this bias is introduced and recommend that careful consideration be applied for anyone using the dataset.

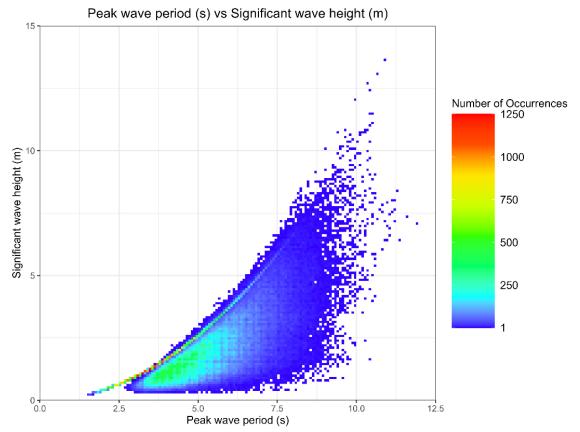


Figure 3-8 Kernel density plot of significant wave height and peak wave period

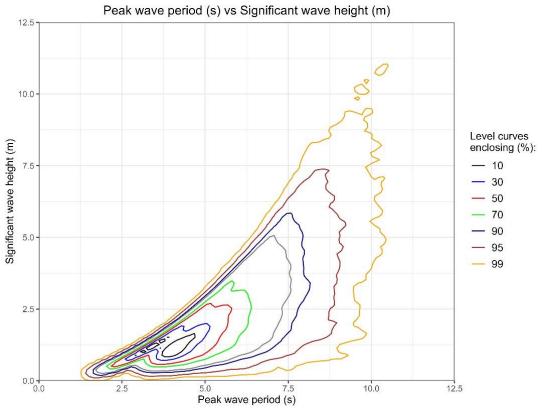


Figure 3-9 Contour plot of significant wave height and peak wave period

#### IDEA-IRL WP1 D1C

A weather window analysis was carried out using various limits of significant wave height and wind speed at 10 m above sea level. Table 3-14 shows the percentage of time for each month, for which weather window limits with specific Hs and wind speed specifications, along with durations ranging from 3 hours and 72 hours, occur.

Table 3-14 Wind-wave persistence – Weather Windows (10 m wind speeds)

	Time duration threshold (hours)	Month												Overall dataset
	(Hours)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Hs < 1.5 m, Uw < 5m/s	3	7.9	7.6	17.7	24.1	28.1	32.8	32.6	27.5	22.6	14.4	11.6	6.3	19.5
	6	7.2	6.3	16.3	22.2	26.1	30.6	30.1	24.9	20.3	13.0	10.5	5.4	17.8
	12	5.6	4.9	14.0	18.4	21.4	24.9	24.5	20.2	16.7	10.3	8.3	4.3	14.6
E,	24	3.7	2.4	10.7	12.3	14.9	17.8	15.5	13.0	11.6	6.0	4.6	1.7	9.7
< 1.5	48	1.0	0.4	4.7	6.5	4.4	7.6	6.3	5.4	4.8	2.1	1.0	NA	3.8
÷	72	NA	NA	1.9	3.0	1.8	2.4	4.8	1.7	2.8	0.5	NA	NA	1.7
s/u	3	12.0	12.0	21.5	28.3	30.8	35.1	34.0	29.6	26.2	18.1	15.0	9.7	16.5
> 5n	6	11.0	10.5	19.6	25.8	28.6	32.7	31.4	26.9	23.7	16.4	13.6	8.3	15.6
»	12	8.6	8.3	16.7	20.9	23.8	27.2	25.4	21.6	20.1	12.5	10.5	6.5	13.4
< 2.0 m, Uw < 5m/s	24	5.1	5.1	13.1	14.6	16.2	19.4	16.5	13.6	14.1	7.6	5.8	3.8	8.9
< 2.0	48	1.6	1.1	6.8	6.9	6.2	8.2	6.9	5.7	5.9	2.7	1.4	0.3	4.2
Ŧ	72	NA	NA	2.5	3.4	1.8	3.3	4.8	1.7	3.3	1.0	0.4	NA	1.9
s/u	3	14.2	14.6	24.1	30.0	31.6	35.8	34.2	30.1	27.3	19.5	16.8	11.4	24.2
< 2.5 m, Uw < 5m/s	6	12.8	12.8	22.0	27.4	29.2	33.3	31.6	27.3	24.6	17.7	15.3	9.7	22.0
Š	12	10.0	10.3	18.7	22.2	24.4	27.6	25.5	21.7	20.8	13.7	11.8	7.4	18.0
Ę,	24	6.3	6.1	14.0	15.3	16.5	19.8	16.6	13.8	14.7	8.3	6.8	4.3	12.1
< 2.!	48	1.6	2.0	7.0	6.9	6.4	8.3	6.9	5.7	6.0	3.2	1.5	0.4	4.8
£	72	NA	0.5	2.9	3.4	2.3	3.3	4.8	1.7	3.3	1.0	0.4	0.4	2.2
s/u	3	16.5	17.1	25.7	31.2	32.0	36.0	34.4	30.4	27.8	20.3	18.5	13.2	25.3
< 3.5 m, Uw < 5m/s	6	14.8	15.1	23.4	28.3	29.6	33.5	31.6	27.5	25.0	18.3	16.7	11.3	23.0
Š	12	11.5	11.9	19.9	22.7	24.9	27.7	25.6	21.9	21.0	14.1	12.9	8.2	18.6
Ë,	24	7.1	7.2	14.9	15.4	16.7	19.8	16.6	14.0	14.7	8.3	7.3	4.4	12.4
3.	48	1.9	2.5	7.0	7.2	6.4	8.3	6.9	5.8	6.0	3.5	1.5	0.4	4.9
Hs	72	NA	0.9	2.9	3.4	2.3	3.3	4.8	1.7	3.3	1.0	0.4	0.4	2.2
7.5	3	14.2	15.1	28.9	41.7	47.8	53.4	57.5	53.6	44.3	27.2	21.9	13.4	35.0
	6		14.3	27.7	39.9	46.5	51.9		51.9		26.0	20.8	12.6	33.8
Hs < 1.5 m, Uw < m/s	12	12.0	13.0	25.4	36.8	43.4	48.8	52.9	48.5	39.3	23.8	18.6	11.1	31.3
5 m	24	9.7	9.6	21.8	29.9	37.8	42.1	44.7	40.3	32.5	19.0	14.4	7.6	26.1
s < 1	48	4.8	4.3	17.4	21.0	25.4	31.3	35.1	25.7	22.3	11.9	5.6	3.4	18.1
Ï	72	3.2	1.8	12.2	16.5	16.8	22.8	25.4	15.3	14.9	5.8	1.6	1.4	12.3
7.5	3	23.2	25.0	39.7	52.4	55.3	60.7	62.9	60.2	54.0	38.1	30.1	22.1	43.7
Hs < 2.0 m, Uw < 7.5 m/s	6	22.0	23.6	37.7	50.4	53.7	58.7	60.9	58.2	52.1	36.7	28.4	20.7	42.1
m, Uv m/s	12	19.6	21.4	34.2	46.9	49.6	54.9	57.1	54.0	48.3	32.9	25.6	18.7	38.8
0 n r	24	15.6	17.3	28.7	38.5	43.9	49.2	48.6	44.9	41.1	27.5	19.5	14.0	32.8
s < 2	48	8.6	9.8	22.5	26.0	30.9	36.6	39.3	30.2	27.9	17.3	9.7	6.4	23.0
I	72	4.6	5.9	16.5	19.3	20.2	27.5	28.9	17.2	20.1	9.1	6.8	2.9	16.1

rύ	3	28.9	31.0	46.3	57.6	58.7	63.5	64.3	62.2	57.9	42.3	35.1	27.4	48.0
, <b>,</b> , ,	6	27.4	29.2	44.1	55.5	57.1	61.3	62.1	60.1	55.8	40.7	33.1	25.8	46.2
< 2.5 m, Uw < 7.5 m/s	12	24.2	26.3	40.2	51.5	52.1	56.8	58.3	55.5	52.2	36.8	29.7	22.9	42.5
	24	19.6	21.0	33.3	42.8	45.8	50.8	48.9	45.9	43.6	30.7	22.6	17.0	35.6
	48	10.8	13.0	24.8	29.8	32.1	37.7	40.1	30.8	30.6	19.1	11.6	8.9	25.0
£	72	6.3	8.8	18.0	20.5	21.6	28.6	29.4	17.7	21.5	10.7	7.7	4.2	17.5
r.	3	35.0	37.0	51.3	61.5	60.1	64.5	64.8	63.1	59.5	45.5	39.0	32.4	51.2
v < 7.5	6	32.9	34.9	48.9	59.5	58.3	62.3	62.6	61.1	57.3	43.4	36.4	30.5	49.1
< 3.5 m, Uw m/s	12	29.2	31.5	44.6	54.9	53.7	57.9	58.6	56.4	53.5	39.0	32.3	26.6	45.1
7. E E	24	22.8	24.8	36.5	45.3	46.7	51.7	49.1	46.6	44.8	32.1	24.7	19.5	37.5
× ×	48	12.2	15.1	27.9	31.8	32.2	38.4	40.2	31.3	31.1	20.3	13.3	10.3	26.3
H <sub>S</sub>	72	7.5	10.4	18.9	23.9	22.1	28.7	29.4	18.4	21.6	12.1	8.6	4.7	18.5
< 1.5 m, Uw < 10 m/s	3	17.4	18.5	32.4	49.1	56.4	62.7	68.2	64.0	53.5	32.8	28.3	16.7	41.8
	6	17.0	17.7	31.8	48.1	55.6	62.1	67.3	63.1	52.6	31.9	27.5	16.0	41.0
	12	16.1	16.8	30.1	46.2	53.5	60.6	66.1	61.6	50.4	30.3	26.0	15.1	39.6
	24	13.2	13.5	26.7	42.6	50.0	56.4	62.6	57.8	45.8	25.6	21.8	12.1	36.0
Hs < 1	48	9.1	7.2	21.3	34.9	42.9	50.1	52.6	47.0	37.2	18.5	13.6	6.6	29.5
I	72	6.1	2.9	18.3	29.4	34.5	41.8	46.1	36.4	29.8	12.6	5.8	2.8	23.6
10	3	32.0	33.8	50.0	66.5	71.5	76.7	80.9	78.5	70.6	51.5	43.6	31.2	57.4
Hs < 2.0 m, Uw < 10 m/s	6	31.2	32.9	48.8	65.4	70.2	75.6	80.0	77.5	69.5	50.6	42.5	30.2	56.4
m, U m/s	12	29.5	30.8	46.6	63.4	68.0	73.8	78.3	76.1	68.0	48.0	39.8	28.3	54.5
2.0 r	24	26.4	27.3	42.9	58.7	64.2	69.9	74.9	72.6	63.6	43.5	34.3	24.0	50.6
<u>s</u> × <u>s</u>	48	20.9	19.5	35.1	50.9	56.7	62.6	66.1	62.6	54.2	31.6	24.2	16.2	42.8
	72	13.9	13.8	30.9	42.8	50.6	56.6	59.4	53.4	46.6	22.4	17.5	9.7	36.6
< 10	3	42.1	44.8	61.9	75.2	79.1	83.5	85.0	83.2	78.2	61.4	52.4	42.1	65.8
∨ ≥	6	40.7	43.6	60.7	74.0	77.6	82.3	84.0	82.2	77.3	60.2	50.8	40.8	64.7
m, U, m/s	12	38.4	40.4	58.4	72.5	75.5	80.5	82.2	80.4	75.7	57.7	48.5	38.0	62.6
< 2.5 m, Uw m/s	24	34.8	35.7	54.1	67.9	70.7	75.9	78.6	76.4	69.7	51.9	41.9	33.2	58.0
Hs < 2	48	28.5	26.1	45.4	59.4	62.4	68.5	68.9	66.7	60.0	38.3	29.8	24.0	49.4
	72	19.3	19.6	38.5	50.2	55.2	61.1	61.3	58.7	54.3	29.0	20.4	16.5	42.5

### 3.6 Wind-wave misalignment

The wind-wave misalignment was defined as the wind direction minus the mean wave direction for each time step and was analysed with respect to the wind speed at hub height (150 mMSL). Scatter diagram of the misalignment of the full datasets against wind speed at hub height is presented in Figure 3-10. Wind speed was binned into 2 m/s bins and the mean misalignment for that bin was calculated. A scatter plot displaying the results of this analysis for omni-directional and 22.5 ° sectors is given in Figure 3-11.

As expected, wind-wave misalignment values are relatively higher at lower wind speeds and reduces as wind speed increases. Misalignment is also lowest in the prevailing south-western to western directional sectors.

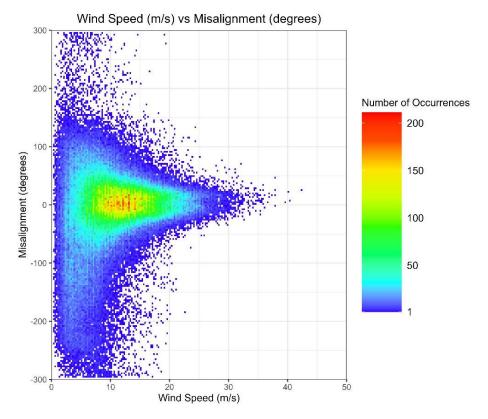


Figure 3-10 Wind-wave misalignment – full dataset (wind speed at hub height)

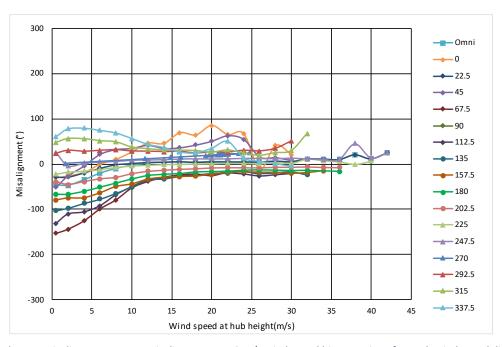


Figure 3-11 Wind-wave misalignment. Mean misalignment per 2 m/s wind speed bins are given for each wind speed directional sector

Kernel density and contour plots for significant wave height and wind speed at hub height (150 m) are presented in Figure 3-12 and Figure 3-13.

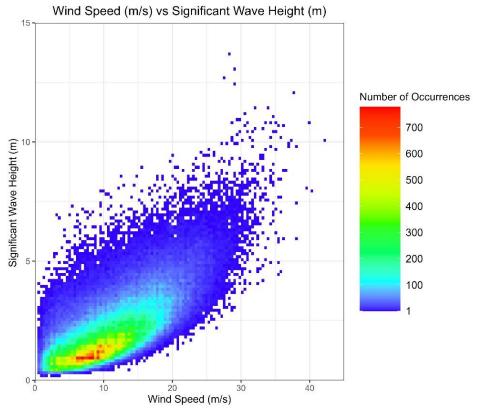


Figure 3-12 Kernel density plot of significant wave height and wind speed at 150 m above sea level

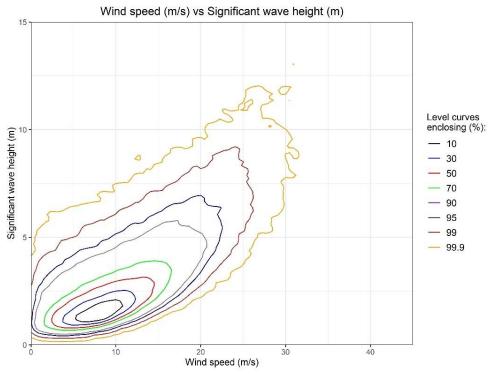


Figure 3-13 Contour plot of significant wave height and wind speed at 150 m above sea level

Wind-wave coincidence and exceedance tables for wind speeds at 10 m above sea level are provided in Figure 0-2 in the Appendix.

#### 3.7 Extreme Sea States

The measured Kinsale Alpha Platform dataset that was gap filled with the ERA5 modelled dataset [5] was used to calculated extreme wave variables. For this study, a generalised extreme value (GEV) methodology was chosen as the best-fitting analysis to calculate the extreme values for wave height at this location. Due to the adequate length of the wave dataset, the block maxima (annual maxima) approach was chosen to extract extreme events over the 43-year time period as input into the general extreme value analysis.

#### Return values in the GEV model

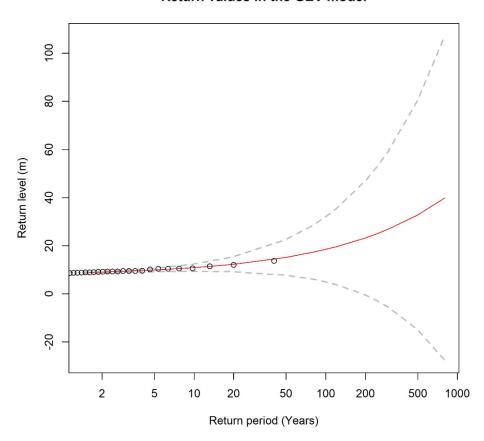


Figure 3-14 Return values of significant wave height (Hs) in the GEV model. Red curve represents the best fit with the data and aligns with the input data. Dashed lines represent the 95 % confidence intervals. Distribution parameters: location = 8.599; scale = 0.616; shape = -0.284.

The predicted 1-, 50- and 100-year return values of significant wave height  $H_s$  is presented in Table 3-5. The maximum wave height is determined according to the equation provided in IEC 61400-3-1: 2019 [9].

$$H_{max} = 1.86 H_{s}$$

The wave period associated with maximum wave height,  $T_{Hmax}$  or  $T_{ass}$ , is calculated based on the relationship between  $H_s$  and  $T_{ass}$  (IEC 61400-3-1: 2019 [9]).

$$11.1\sqrt{\frac{H_s}{g}} \le T_{ass} \le 14.3\sqrt{\frac{H_s}{g}}$$

Where g is the acceleration due to gravity. The following equation provided in DNV-RP-C205: 2021 [10] is used to estimate the upper and lower limits of peak wave period  $T_p$ .

$$T_{ass} = 0.9T_p$$

It is noted that, IEC 61400-3-1: 2019 [9] recommend a 3-hour sea state as input into extreme value analysis. In this study, a 1-hour sea state is utilised and therefore the calculated extreme values are considered conservative.

Return Period (Years)	Height, H <sub>s</sub> (s) (Lower Limit) (7.74 10.96 8.76 11.66		Peak Period, T <sub>p</sub> (s) (Upper Limit)	Maximum Wave Height, H <sub>max</sub> (m)	Period of Max Wave, T <sub>Hmax</sub> (s) (Lower Limit)	Period of Max Wave, T <sub>Hmax</sub> (s) (Upper Limit)
1	7.74	10.96	14.11	14.40	9.86	12.70
2	8.76	11.66	15.02	16.29	10.49	13.52
50	15.15	15.33	19.74	28.18	13.80	17.77
100	18.47	16.92	21.80	34.35	15.23	19.62

Table 3-15 Omni-directional Extreme Wave Data

#### 3.8 Severe Sea States

The severe sea states (SSS) conditions are found using Inverse First-Order Reliability Method (IFORM) as recommended by IEC 61400-3-1; 2019 [9]. The methodology described in Papi et al [11] was followed. The 50-year and 1-year environmental contours of  $V_{hub}$ - $H_S$  are shown as solid lines in Figure 3-15. The SSS values, defined by the points along the 50-year contours across a range of hubheight wind speeds are provided in Table 3-16. The wind speeds at hub-height are provided for a wider range of speeds to account for variations in turbine cut-in and cut-out speeds.

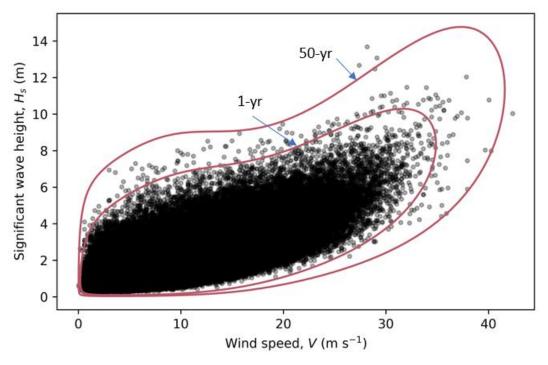


Figure 3-15 Wind speed (150 m) – significant wave height environmental contours compute with IFORM method

Table 3-16 Severe sea states for a wide range of wind speed bins, computed from IFORM Method

ID	Vhub (150 m)	Hs	Тр	Tp min	Tp max
0	1	5.9	8.1	6.9	9.4
1	2	6.7	8.5	7.4	9.9
2	3	7.2	8.8	7.6	10.2
3	4	7.6	9.0	7.8	10.4
4	5	8.0	9.2	8.0	10.6
5	6	8.3	9.3	8.1	10.7
6	7	8.5	9.5	8.2	10.9
7	8	8.7	9.6	8.3	11.0
8	9	8.9	9.6	8.3	11.0
9	10	9.0	9.7	8.4	11.1
10	11	9.0	9.7	8.4	11.1
11	12	9.0	9.7	8.4	11.1
12	13	9.1	9.7	8.4	11.1
13	14	9.1	9.7	8.4	11.1
14	15	9.1	9.7	8.4	11.2
15	16	9.1	9.7	8.4	11.2
16	17	9.2	9.8	8.5	11.2
17	18	9.3	9.8	8.5	11.3
18	19	9.4	9.9	8.6	11.3
19	20	9.6	10.0	8.6	11.4
20	21	9.8	10.1	8.7	11.6
21	22	10.1	10.2	8.8	11.7
22	23	10.4	10.3	8.9	11.8
23	24	10.7	10.4	9.1	12.0
24	25	11.1	10.6	9.2	12.2
25	26	11.4	10.7	9.3	12.3
26	27	11.8	10.9	9.5	12.5
27	28	12.2	11.1	9.6	12.7
28	29	12.6	11.2	9.7	12.9
29	30	13.0	11.4	9.9	13.0

#### 3.9 Currents – Normal Conditions

A 12 year hourly time series of bottom, mid and surface current speeds and directions were extracted from the three-dimensional Northeast Atlantic Model, an implementation of the ROMS model for Irish Waters [6] at -8.0125°, 51.3625°. The current roses of this dataset are presented in Figure 3-16 to Figure 3-18. Monthly, annual and overall statistics are presented in Table 3-17 to Table 3-20.

#### Bottom current roses based on 2012 to 2023 dataset NNW NNE NW NE Current Speed (m/s) 10-0.9 - 1 WNW ENE 0.8 - 0.9 5-0.7 - 0.8 0.5 - 0.6 E 0.3 - 0.4 0.2 - 0.3 0.1 - 0.2 0 - 0.1 WSW ESE SW SE SSW SSE S

Figure 3-16 Current rose (12-year modelled bottom current)

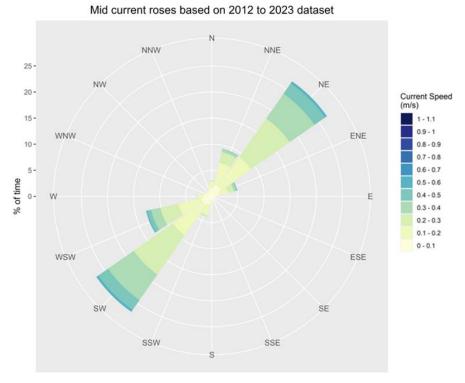
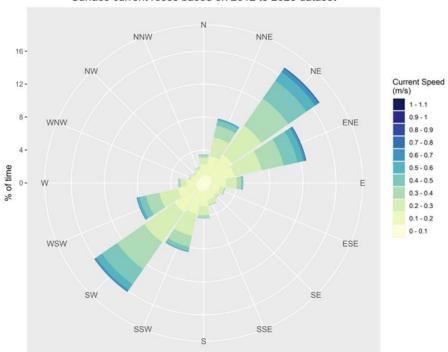


Figure 3-17 Current rose (12-year modelled mid current)



#### Surface current roses based on 2012 to 2023 dataset

Figure 3-18 Current rose (12-year modelled surface current)

Table 3-17 Percent exceedance of bottom, mid and surface current speeds (derived from the 12-year modelled dataset)

Exceedance threshold (m/s)	Bottom current speed exceedance (%)	Mid-current speed exceedance (%)	Surface current speed (%)
0.1	54.04	78.31	85.44
0.2	8.00	47.53	56.60
0.3	0.03	21.7	31.02
0.4		7.01	14.01
0.5		1.15	5.07
0.6			1.48
0.7			0.35
0.8			0.07
0.9			0.00

Table 3-18 Monthly bottom, mid and surface current statistics (derived from the 12-year modelled dataset)

	Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
speed	mean	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.11	0.11	0.12	0.12	0.12
nt sp	max	0.32	0.31	0.32	0.31	0.28	0.27	0.26	0.29	0.29	0.32	0.30	0.30
current (m/s)	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
_	P25	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
bottom	P50	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11

	P75	0.16	0.16	0.16	0.15	0.14	0.14	0.13	0.14	0.15	0.15	0.16	0.16
	P90	0.20	0.20	0.21	0.19	0.18	0.17	0.17	0.18	0.19	0.19	0.20	0.20
	P95	0.22	0.23	0.24	0.22	0.20	0.19	0.19	0.20	0.21	0.22	0.22	0.22
	mean	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.22	0.22	0.21	0.20	0.20
(s/	max	0.56	0.58	0.59	0.56	0.55	0.58	0.69	0.69	0.69	0.60	0.56	0.58
m) p	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mid current speed (m/s)	P25	0.11	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.11	0.11
rent	P50	0.18	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.19	0.19
d cur	P75	0.27	0.27	0.28	0.28	0.28	0.28	0.29	0.30	0.30	0.29	0.28	0.27
Ē	P90	0.35	0.37	0.38	0.37	0.36	0.36	0.37	0.40	0.41	0.39	0.36	0.34
	P95	0.40	0.41	0.43	0.42	0.40	0.41	0.42	0.45	0.47	0.44	0.41	0.39
	mean	0.24	0.25	0.24	0.24	0.24	0.24	0.24	0.25	0.24	0.24	0.24	0.25
surface current speed(m/s)	max	0.93	0.96	0.85	0.77	0.83	0.82	0.82	0.97	0.94	0.85	0.83	0.98
)eed(	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nt sp	P25	0.13	0.14	0.13	0.14	0.14	0.15	0.14	0.14	0.13	0.13	0.13	0.14
curre	P50	0.22	0.22	0.22	0.22	0.23	0.23	0.22	0.23	0.22	0.22	0.22	0.23
асе (	P75	0.32	0.34	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33	0.32	0.33
surf	P90	0.43	0.45	0.45	0.44	0.42	0.42	0.42	0.44	0.44	0.45	0.43	0.44
	P95	0.50	0.52	0.52	0.50	0.48	0.48	0.48	0.51	0.51	0.51	0.50	0.51
om	mean	233.9	232.8	235.8	237.5	242.5	243.7	245	245	245.3	241.9	235.2	232.4
bottom	mean	64.4	67.7	70.8	75.7	79.7	80.6	82.5	80.9	80.1	76.8	67.3	65.0
mid current direction (°)	mean	230.9	230.0	233.1	232.8	236.4	239.9	243.9	244.9	245.5	237.8	231.1	227.9
mid cı directi	mean	58.0	59.0	57.8	56.7	55.6	57.1	59.3	65.7	62.1	56.2	58.7	59.2
surface	mean	225.5	229.3	236.6	235.7	231.1	233.0	224.9	224.3	232.5	230.9	224.7	224.2
surf	mean	70.8	72.3	72.6	72.8	77.3	81.1	81.1	77.6	71.0	69.3	71.6	71.8

Table 3-19 Annual bottom, mid and surface current statistics (derived from the 12-year modelled dataset)

	Statistic	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	mean	0.10	0.10	0.10	0.10	0.10	0.12	0.12	0.12	0.12	0.12	0.12	0.12
(s/u	max	0.30	0.31	0.30	0.30	0.32	0.30	0.32	0.31	0.31	0.30	0.30	0.30
bottom current speed (m/s)	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıt spe	P25	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
urrer	P50	0.10	0.09	0.10	0.10	0.10	0.12	0.12	0.12	0.11	0.11	0.11	0.11
o mo	P75	0.14	0.13	0.13	0.13	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.15
bott	P90	0.17	0.17	0.17	0.17	0.17	0.21	0.21	0.20	0.20	0.20	0.20	0.19
	P95	0.19	0.19	0.19	0.19	0.20	0.23	0.23	0.23	0.23	0.22	0.22	0.21
en t n/s)	mean	0.19	0.19	0.19	0.19	0.19	0.22	0.22	0.22	0.22	0.21	0.21	0.21
mid curren t speed (m/s)	max	0.60	0.69	0.67	0.61	0.64	0.60	0.69	0.66	0.69	0.60	0.60	0.67
mid spe	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	P25	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.11
	P50	0.17	0.17	0.17	0.18	0.18	0.21	0.21	0.21	0.20	0.20	0.20	0.20
	P75	0.26	0.26	0.26	0.26	0.26	0.31	0.31	0.31	0.30	0.30	0.30	0.29
	P90	0.33	0.33	0.33	0.33	0.34	0.40	0.40	0.39	0.39	0.39	0.39	0.38
	P95	0.38	0.38	0.38	0.38	0.38	0.45	0.45	0.44	0.44	0.43	0.44	0.43
	mean	0.22	0.23	0.23	0.23	0.23	0.26	0.26	0.26	0.26	0.25	0.26	0.25
n/s)	max	0.86	0.85	0.93	0.89	0.89	0.85	0.83	0.82	0.97	0.98	0.96	0.94
surface current speed(m/s)	min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nt sp	P25	0.12	0.13	0.13	0.14	0.13	0.14	0.15	0.15	0.15	0.14	0.14	0.14
urrei	P50	0.20	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.23	0.23	0.23	0.23
ace c	P75	0.30	0.31	0.31	0.31	0.31	0.35	0.35	0.35	0.35	0.34	0.35	0.34
surf	P90	0.41	0.40	0.41	0.41	0.40	0.46	0.46	0.45	0.47	0.45	0.46	0.45
	P95	0.47	0.46	0.48	0.47	0.45	0.52	0.52	0.51	0.54	0.52	0.53	0.51
bottom current direction (°)	mean	239.6	237.9	240.9	239.1	236.8	239.9	239	240	239.4	238.3	240.4	240
boti curi direct	mean	77	74	75.8	74.2	73.2	74.7	73.3	72.8	72	74.7	75.4	75.1
mid current direction (°)	mean	240.4	237.4	236.5	239.6	237.5	236.7	236.3	235.8	234.4	232.9	236	233.2
mid cı directi	mean	60.2	59.2	59.5	61.3	60.2	56.5	57.6	56.2	58.3	56.3	60.8	58.8
surface current direction (°)	mean	231.5	233.8	229	232	232	224.3	233.5	226.2	228.4	227.8	230	225.8
surf curr directi	mean	74.1	75.1	74.3	74	76	71.9	71.7	72.9	74.9	72.2	74.2	76.7

Table 3-20 Overall bottom, mid and surface current statistics (derived from the 12-year modelled dataset)

Current variable	Statistic	Value
	mean	0.11
	max	0.32
	min	0.00
bottom current speed	P25	0.07
(m/s)	P50	0.11
	P75	0.15
	P90	0.19
	P95	0.22
	mean	0.21
	max	0.69
	min	0.00
mid current speed (m/s)	P25	0.11
illia current speed (ill/s)	P50	0.19
	P75	0.29
	P90	0.37
	P95	0.42
	mean	0.24

	max	0.98
	min	0.00
	P25	0.14
surface current speed(m/s)	P50	0.22
opoca(, o <sub>j</sub>	P75	0.33
	P90	0.44
	P95	0.50
bottom current direction	mean	239.0
(°)	mean	74.2
mid current direction (°)	mean	237.0
mid current direction (°)	mean	58.7
surface current direction	mean	230.0
(°)	mean	74.1

#### 3.10 Currents – Extreme Conditions

The 1- and 50-year extreme omnidirectional bottom, mid and surface current speeds, calculated from a 12-year hourly NEATL time series are presented in Table 3-21 and Figure 3-19 to Figure 3-21. The GEV methodology was chosen to calculate the extreme values for current speeds and the peaks-over-threshold method was chosen to extract discrete extreme events over the 12-year time period as input into the general extreme value analysis.

Table 3-21 Omni-directional bottom, mid and surface current extreme return values statistics (derived from the 12-year modelled dataset)

	1-Year	50-Year
Bottom current speed (m/s)	0.29	0.32
Mid current speed (m/s)	0.60	0.10
Surface current speed (m/s)	0.10	1.41

## 0.40 0.38 0.36 Return level (m/s) 0.34 0.32 0.30 0.28 2 5 10 20 50 100 200 500 1000 Return period (Years)

Return values in the GEV model

# Figure 3-19 Return values of bottom current speed (m/s) in the GEV model. The red curve represents the best fit with the data and aligns with the input data. Dashed lines represent the 95 % confidence intervals. Distribution parameters: location = 0.3008; scale = 0.0061; shape = -0.0466

#### Return values in the GEV model

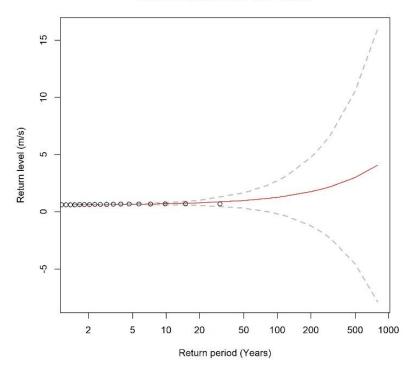


Figure 3-20 Return values of mid-current speed (m/s) in the GEV model. The red curve represents the best fit with the data and aligns with the input data. Dashed lines represent the 95 % confidence intervals. Distribution parameters: location = 0.6108; scale = 0.0223; shape = -0.1533

#### Return values in the GEV model

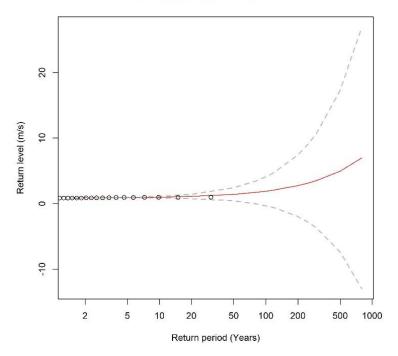


Figure 3-21 Return values of surface current speed (m/s) in the GEV model. The red curve represents the best fit with the data and aligns with the input data. Dashed lines represent the 95 % confidence intervals. Distribution parameters: location = 0.8512; scale = 0.0296; shape = 0.2231

#### 3.11 Marine Growth

As no confirmed measurements have been carried out, marine growth thicknesses for design for both cases are based on recommended values for UK waters in DNVGL-ST-0437 [12]. These are summarised in Table 3-22. The dry density of marine growth will be taken as 1325 kg/m³ (DNVGL-ST-0437 [12]).

Table 3-22 Marine growth thickness

Depth below MWL (m)	Marine Growth Thickness (mm)
-2 to 40	100
> 40	50

#### 3.12 Other parameters

Other environmental parameters are defined as follows (DNVGL-ST-0437 [12]):

Sea water density: 1025 kg/m³ (assumed in lieu of site-specific measurement)

Sea water salinity: 3.5 %

#### 4 Conclusion

A preliminary Front-End Engineering Design Metocean Study has been produced for IDEA-IRL's reference site 3. This reference site represents an area around the Kinsale Energy Alpha Platform located off the southern coast of Ireland. A robust set of metocean parameters was produced that will be used to inform the design of the reference floating wind arrays in WP2. The results presented herein can only be considered as a pre-FEED study and are aimed to serve as input for preliminary design. This report serves as an appendix to the summary report for WP1.

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Appendix

Scatter plots (all wind speeds)

		Tp (s)																												
Vhub	(All speeds)	(0 - 0.25)	(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 -	(7.25 - 7.75)	(7.75 - 8.25)		(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	(12.75 - 13.25)	sum	cumulative sum
	(0 - 0.25)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	(0.25 - 0.75)	0.00	0.00	0.00	0.05	0.93	1.97	0.48	1.80	1.61	1.02	0.48	0.22	0.09	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	8.73
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.41	3.33	4.13	5.73	3.97	2.59	1.60	0.86	0.43	0.19	0.06	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.35	32.08
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.99	4.58	5.04	3.87	2.39	1.56	0.96	0.50	0.22	0.09	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	53.36
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	3.36	3.80	2.96	1.94	1.24	0.69	0.32	0.15	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.37	68.74
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	2.58	2.66	2.18	1.37	0.80	0.40	0.18	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.70	79.43
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	1.82	1.70	1.34	0.88	0.51	0.28	0.11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	86.49
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	1.39	1.23	0.88	0.53	0.29	0.13	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.94	91.43
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.89	0.81	0.53	0.24	0.11	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	3.19	94.62
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.55	0.63	0.47	0.24	0.13	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	2.10	96.72
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.49	0.38	0.23	0.13	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.33	98.06
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.33	0.19	0.12	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.84	98.90
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17	0.13	0.08	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.44	99.34
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.08	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.27	99.60
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.16	99.76
ns (III)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	99.85
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06	99.92
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.95
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	99.97
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	99.98
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	99.99
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	99.99
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	100.00
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
	sum	0.00	0.00	0.00	0.06	0.93	2.37	3.81	7.93	12.72	13.80	13.70	12.09	10.27	8.09	5.99	3.97	2.23	1.20	0.52	0.20	0.09	0.03	0.01	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.06	0.99	3.36	7.17	15.10	27.82	41.62	55.32	67.41	77.68	85.76	91.76	95.72	97.96	99.16	99.68	99.87	99.96	99.99	100.00	100.00	100.00	100.00	100.00		

Figure 0-1 Frequency of occurrence (%) scatter plot of Tp vs Hs (All wind speeds)

Service   19															Si	gnificant wa	ve height	(m)															
1 3																																	cumulative
1 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00.10								0.0						010 1																		sum
1																								0.00									0.11
Part																																	0.77 2.07
3 3 3 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5						0.00																											
The column   The																																	7.50
14	2.5 - 3	0.18	1.33	0.84	0.34	0.16	0.08	0.05	0.02	0.01	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02	10.51
1.33   0.10   1.86   1.35   0.27   0.11   0.0   0.01   0.00   0	3 - 3.5	0.19	1.59	1.09	0.50	0.22	0.10	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	14.32
1.33   0.07   1.14   1.75   0.28   0.17   0.0																																	18.25
The column   The																																	22.33
1-12   1-12																																	27.16
State   Stat																																	32.52 37.66
St. 7																																	42.81
The column   The																																	48.64
The column   The																																	53.69
9.13							0.43															0.00	0.00						0.00	0.00	0.00		58.88
9-35   90   60   10   11   10   10   10   11   10   10   11   10		0.00	0.17	1.50	1.47	0.83	0.45	0.24	0.13	0.07	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00		0.00	0.00			0.00	0.00	4.93	63.81
1.1.   1.1.						****																											68.28
10 - 11																																	76.36 79.85
11-12 00 180 00 00 00 00 00 00 00 00 00 00 00 00 0																																	79.85 82.97
15 12 12 80 80 80 50 50 50 50 50 50 50 50 50 50 50 50 50						****																											85.66
## 12 13   90   90   90   90   90   90   90   9																			0.00														88.28
## 13.15   0.00	<b>5</b> 12 - 12.5	0.00	0.00	0.01	0.15	0.45	0.44	0.33	0.24	0.15	0.09	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96	90.23
8 13-14 080 680 680 680 680 680 680 680 680 680	12.5 - 13	0.00	0.00			0.34	0.41	0.34	0.26	0.16	0.09	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	1.78	92.01
## 14.14.2																																	93.52
\$\ \begin{subarray}{c} \ \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \																																	
\$\frac{9}{8}\$ \frac{15}{15}\$ \frac{1}{3}\$ \frac{0}{0}\$ \f																																	95.85
15 15 16 0 00 0 00 0 00 0 00 0 00 0 00 0						0100								0102	9101							0100	0100							9199	9190		96.71 97.46
Fig. 16.5   0.00   0.																																	
Till				0.00																													
175 - 18		0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.05	0.06	0.07			0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		98.87
S   18   18   18   18   18   18   18	g. 17 - 17.5	0.00	0.00			0.00	0.01	0.02	0.03	0.04	0.05	0.05	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	0.28	99.15
15.19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0																			0.00														99.36
19-19-3   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.00																																	
19520 0.00 0.00 0.00 0.00 0.00 0.00 0.00	2010 20							0.00		0.02						0.02		0.00			0.00											0.20	99.64
25 : 23 : 0.0								0.00								0.02		0.02															99.73 99.81
2521 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.																																	99.86
215-22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0																																	
22.223 0.00 0.00 0.00 0.00 0.00 0.00 0.0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	99.93
22.5.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0																				0.00													99.95
23:23.5 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00																																	99.96
23.5.24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0																																	99.97
24:243 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.																																	99.98
24.5-25 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.																																	99.99
25:25.5 0.00 0.00 0.00 0.00 0.00 0.00 0.00																																	99.99
2526 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.																																	100.00
2577 0.00 0.00 0.00 0.00 0.00 0.00 0.00	25.5 - 26																				0.00												100.00
27:27:3 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.																																	100.00
27.5 - 28																																	100.00
23-23-3 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0																																	
28.5-29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.							0.00								0100	0.00	0.00						0100							0.00			100.00
29-28-3 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.																																	100.0
25.5 30 0.00 0.00 0.00 0.00 0.00 0.00 0.0																																	100.0
39 - 30.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			0100																													0.00	100.0
Sum 1.38 1.75 23.4 18.5 12.96 8.76 6.07 3.99 2.56 1.73 1.10 0.54 0.34 0.39 2.66 1.73 1.10 0.54 0.34 0.34 0.34 0.34 0.35 0.35 0.35 0.35 0.35 0.35 0.35 0.35																																	100.0
			17.55	23.84	18.55	12.96	8.76			2.56	1.73				0.20			0.05	0.03	0.01	0.01	0.01	0.01	0.00		0.00	0.00	0.00	0.00	0.00	0.00		
ve sum   1.38   18.93   42.78   61.33   74.29   83.06   89.13   93.12   95.68   97.41   98.51   99.44   99.49   99.69   99.81   99.96   99.98   99.99   99.99   100.00   100	cumulati																																
	ve sum	1.38	18.93	42.78	61.33	74.29	83.06	89.13	93.12	95.68	97.41	98.51	99.14	99.49	99.69	99.81	99.88	99.94	99.96	99.98	99.98	99.99	99.99	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

Figure 0-2 Wind-wave coincidence (frequency of occurrence). Wind speeds are 10 m above sea level

# 3D Scatter plots (Vs-Hs-Tp)

	71013 (		. 10 /											Tp (s)														
v	nub 1 - 3 m/s		(0.25 - 0.75)	(0.75 - 1.25)					(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)		(5.25 - 5.75)	(5.75 - 6.25)		(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)		(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)		(11.25 - 11.75)	(11.75 - 12.25)	sum	cumulative
	(0 - 0.25)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	o.01
	(0.25 - 0.75)	0.00	0.00	0.00	0.03	0.27	0.33	0.02	0.18	0.33	0.30	0.16	0.08	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	1.76
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.05	0.24	0.07	0.08	0.21	0.34	0.30	0.22	0.15	0.07	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		1.78	3.55
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.03	0.07	0.12	0.13	0.11	0.06	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.66	4.21
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.03	0.05	0.05	0.06	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.29	4.50
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	4.63
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	4.70
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	4.74
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	4.75
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
1.5()	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
-	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75
	sum	0.00	0.00	0.00	0.04	0.27	0.38	0.26	0.30	0.46	0.54	0.55	0.47	0.41	0.37	0.28	0.19	0.14	0.07	0.04	0.01	0.00	0.00	0.00	0.00	0.00		$\vdash$
	cumulative sum	0.00	0.00	0.00	0.04	0.30	0.69	0.95	1.24	1.70	2.24	2.79	3.26	3.67	4.04	4.31	4.50	4.64	4.71	4.75	4.75	4.75	4.75	4.75	4.75	4.75		

															Тр	(s)													
VI	nub 3 - 5 m/s			(0.75 - 1.25)									(5.25 - 5.75)	(5.75 - 6.25)		(6.75 - 7.25)	(7.25 - 7.75)						(10.25 - 10.75)			(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.02	0.38	0.56	0.06	0.38	0.53	0.43	0.21	0.11	0.04	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76	2.77
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.09	0.46	0.16	0.36	0.61	0.67	0.52	0.34	0.18	0.09	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.54	6.30
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.10	0.03	0.12	0.23	0.32	0.30	0.19	0.09	0.04	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.60	7.90
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.01	0.04	0.08	0.13	0.15	0.09	0.06	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	8.56
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.05	0.08	0.07	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	8.87
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.04	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	9.05
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	9.14
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	9.19
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	9.20
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20
	sum	0.00	0.00	0.00	0.02	0.38	0.65	0.52	0.67	1.01	1.11	1.04	0.91	0.81	0.69	0.56	0.35	0.24	0.15	0.07	0.02	0.01	0.00	0.00	0.00	0.00	0.00		$\vdash \vdash \vdash$
	cumulative sum	0.00	0.00	0.00	0.02	0.40	1.05	1.57	2.24	3.25	4.36	5.40	6.30	7.11	7.81	8.36	8.71	8.96	9.10	9.17	9.19	9.20	9.20	9.20	9.20	9.20	9.20		

															Тр	(s)													$\neg$
VI	ub 5 - 7 m/s					(1.75 - 2.25)			(3.25 - 3.75)			(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)					(8.25 - 8.75)			(9.75 - 10.25)				(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.21	0.61	0.13	0.62	0.50	0.21	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.40
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.12	0.80	0.46	0.95	1.03	0.76	0.48	0.22	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.93	7.33
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.19	0.13	0.36	0.52	0.47	0.31	0.13	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41	9.74
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.02	0.10	0.24	0.26	0.21	0.09	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	10.87
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.01	0.04	0.10	0.13	0.09	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	11.37
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.05	0.06	0.06	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	11.63
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	11.75
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	11.81
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	11.83
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	11.85
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	11.85
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
,,	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86
	sum	0.00	0.00	0.00	0.00	0.21	0.73	0.94	1.31	1.70	1.47	1.26	1.14	0.99	0.79	0.55	0.35	0.22	0.12	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.21	0.94	1.88	3.18	4.88	6.35	7.62	8.75	9.74	10.53	11.08	11.44	11.65	11.78	11.84	11.85	11.86	11.86	11.86	11.86	11.86	11.86		

															Тр	(s)													$\neg$
VI	nub 7 - 9 m/s			(0.75 - 1.25)			(2.25 - 2.75)					(4.75 - 5.25)		(5.75 - 6.25)					(8.25 - 8.75)						(11.25 - 11.75)		(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.05	0.35	0.16	0.48	0.20	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	1.31
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.11	0.94	1.14	1.71	1.17	0.58	0.24	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.97	7.27
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.47	0.54	0.95	0.75	0.41	0.16	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.74	11.01
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.18	0.11	0.38	0.47	0.37	0.17	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.86	12.88
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.04	0.15	0.24	0.20	0.11	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	13.78
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.08	0.11	0.11	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	14.22
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.04	0.07	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	14.44
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.09	14.53
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	14.58
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	14.61
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	14.62
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	14.62
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
,	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.63
	sum	0.00	0.00	0.00	0.00	0.05	0.46	1.10	2.02	2.48	1.98	1.74	1.43	1.12	0.89	0.58	0.38	0.22	0.12	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.05	0.50	1.60	3.62	6.09	8.07	9.81	11.24	12.36	13.25	13.83	14.21	14.43	14.55	14.60	14.62	14.62	14.63	14.63	14.63	14.63	14.63		

															Тр	(s)													
Vh	ub 9 - 11 m/s	(0 - 0.25)	(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)		(7.75 - 8.25)		(8.75 - 9.25)		(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.01	0.08	0.10	0.13	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.35
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.03	0.67	1.30	1.58	0.71	0.18	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.51	4.87
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.91	1.28	1.17	0.55	0.17	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.73	9.60
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.30	0.45	0.71	0.57	0.26	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58	12.18
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.14	0.13	0.34	0.33	0.21	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	13.48
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.14	0.19	0.14	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	14.14
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.09	0.11	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	14.49
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	14.65
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	14.72
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	14.76
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	14.78
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	14.79
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
,	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79
	sum	0.00	0.00	0.00	0.00	0.01	0.11	0.77	2.01	2.69	2.35	1.97	1.49	1.18	0.83	0.61	0.41	0.19	0.10	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.01	0.11	0.88	2.89	5.58	7.93	9.90	11.39	12.57	13.40	14.01	14.42	14.61	14.72	14.76	14.78	14.79	14.79	14.79	14.79	14.79	14.79		

															Тр	(s)													
Vh	ub 11 - 13 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)		(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.77	0.83	0.21	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.01	2.04
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	1.36	1.50	0.80	0.22	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.38	6.42
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.63	0.89	0.82	0.34	0.12	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	9.45
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.28	0.36	0.54	0.34	0.11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	11.17
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12	0.15	0.29	0.20	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	12.10
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.08	0.15	0.12	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	12.60
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.09	0.05	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	12.84
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	12.97
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	13.04
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	13.07
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	13.08
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	13.09
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
,	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.09
	sum	0.00	0.00	0.00	0.00	0.00	0.01	0.17	1.23	2.40	2.39	2.06	1.55	1.14	0.87	0.56	0.37	0.18	0.10	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.01	0.18	1.40	3.80	6.19	8.25	9.80	10.94	11.81	12.37	12.74	12.92	13.02	13.06	13.08	13.09	13.09	13.09	13.09	13.09	13.09		

															Тр	(s)													
Vh	ub 13 - 15 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)		(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)			(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.20	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	1.04	1.11	0.34	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.68	3.14
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.90	1.13	0.56	0.15	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.93	6.07
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.51	0.65	0.56	0.19	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	8.10
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.24	0.33	0.34	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	9.28
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12	0.19	0.20	0.10	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	9.97
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.10	0.12	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	10.35
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.07	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	10.56
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	10.66
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	10.71
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	10.73
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	10.73
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	10.74
113(111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.33	1.40	2.13	2.06	1.55	1.20	0.82	0.53	0.35	0.20	0.09	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.36	1.75	3.88	5.94	7.49	8.68	9.50	10.03	10.38	10.58	10.67	10.71	10.73	10.74	10.74	10.74	10.74	10.74	10.74		

															Тр	(s)													
Vhu	ıb 15 - 17 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)			(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.39	0.38	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.94
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.75	0.77	0.26	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	2.83
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.61	0.74	0.36	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	4.71
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.36	0.45	0.24	0.09	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	5.94
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.20	0.30	0.17	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	6.74
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.11	0.17	0.11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	7.25
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.11	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	7.53
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	7.67
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	7.75
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	7.78
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	7.80
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	7.81
113 (111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.48	1.21	1.53	1.43	1.12	0.77	0.53	0.35	0.18	0.09	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.54	1.75	3.28	4.71	5.84	6.60	7.13	7.48	7.66	7.75	7.79	7.81	7.81	7.81	7.82	7.82	7.82	7.82		

															Тр	(s)													
Vhu	ıb 17 - 19 m/s		).25 - .75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)			(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.35	0.34	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.94
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.55	0.48	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	2.17
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.46	0.38	0.14	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	3.24
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.34	0.29	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	4.12
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.22	0.20	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	4.72
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.12	0.11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	5.08
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.07	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	5.27
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	5.37
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	5.41
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	5.43
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	5.43
ns(iii)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.46	0.96	1.10	0.97	0.75	0.52	0.30	0.16	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.56	1.51	2.62	3.59	4.34	4.86	5.17	5.33	5.40	5.43	5.44	5.44	5.44	5.44	5.44	5.44	5.44		

	_														Тр	[s)													
Vh	ub 19 - 21 m/s			(0.75 - 1.25)		(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)		(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)			(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.19
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.26	0.21	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.71
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.34	0.21	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	1.36
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.31	0.20	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	2.03
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.20	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	2.51
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.14	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	2.87
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.09	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	3.09
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	3.22
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	3.28
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	3.31
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	3.33
	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	3.33
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
	sum	0.00	0.00	0.00	0.00	0.00			0.00	0.01	0.10	0.37	0.65	0.67	0.58	0.43	0.28	0.13	0.07	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.48	1.13	1.80	2.38	2.81	3.09	3.22	3.29	3.32	3.33	3.34	3.34	3.34	3.34	3.34	3.34		

	_														Тр	(s)													
Vhu	ib 21 - 23 m/s	(0 - 0.25)		(0.75 - 1.25)		(1.75 - 2.25)	(2.25 - 2.75)		(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)		(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)		(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.15
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.17	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.44
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.24	0.09	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.84
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	1.18
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.14	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	1.48
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	1.69
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.83
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	1.90
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.94
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.96
ns (m)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.96
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.97
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.97
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.98
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.25	0.41	0.39	0.38	0.22	0.11	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.38	0.78	1.18	1.56	1.78	1.89	1.95	1.96	1.97	1.97	1.97	1.97	1.98	1.98	1.98		

															Тр	(s)													
Vh	ub 23 - 25 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.10
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.24
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.41
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.60
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.77
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.91
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.99
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.04
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.06
113 (111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.08
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.17	0.20	0.26	0.19	0.10	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.10	0.27	0.47	0.72	0.91	1.01	1.06	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09		

															Тр	(s)													
Vh	ıb 25 - 27 m/s		(0.25 - 0.75)	(0.75 - 1.25)		(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)		(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)		(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.13
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.21
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.31
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.39
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.45
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.48
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.49
113 (111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.51
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.52
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.06	0.09	0.13	0.12	0.06	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.08	0.17	0.30	0.41	0.47	0.50	0.51	0.52	0.53	0.53	0.53	0.53	0.53	0.53		

															Тр	(s)													
Vhu	b 27 - 29 m/s		.25 - 75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)			(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)		(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)		(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.13
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.17
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.20
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.22
1.5()	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.24
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.25
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.05	0.06	0.05	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.10	0.16	0.20	0.24	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26		

															Тр	(s)													
Vh	ub 29 - 31 m/s			(0.75 - 1.25)		(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)			(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.07
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08
	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11
	(8.75 - 9.25)	0.00	0.00		0.00	0.00			0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00		$\neg$
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.08	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12		

															Тр	(s)													
Vhu	b 31 - 33 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
,	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	J	
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05		

															Тр	(s)													
Vh	ub 33 - 35 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)			(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)		(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)	(6.75 - 7.25)	(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
ns(iii)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02		

															Тр	(s)													
Vhu	b 35 - 37 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)		(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)		(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ns (m)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		

															Тр	(s)													
Vhu	b 37-39 m/s			(0.75 - 1.25)		(1.75 - 2.25)		(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)			(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113 (111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

															Тр	(s)													
Vhu	b 39-41 m/s		(0.25 - 0.75)	(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)			(3.25 - 3.75)		(4.25 - 4.75)			(5.75 - 6.25)	(6.25 - 6.75)					(8.75 - 9.25)	(9.25 - 9.75)				(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113 (111)	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

															Тр	(s)													
Vh	ub 41-43 m/s			(0.75 - 1.25)	(1.25 - 1.75)	(1.75 - 2.25)	(2.25 - 2.75)	(2.75 - 3.25)	(3.25 - 3.75)	(3.75 - 4.25)	(4.25 - 4.75)	(4.75 - 5.25)	(5.25 - 5.75)	(5.75 - 6.25)	(6.25 - 6.75)		(7.25 - 7.75)	(7.75 - 8.25)	(8.25 - 8.75)	(8.75 - 9.25)	(9.25 - 9.75)	(9.75 - 10.25)	(10.25 - 10.75)	(10.75 - 11.25)	(11.25 - 11.75)	(11.75 - 12.25)	(12.25 - 12.75)	sum	cumulati ve sum
	(0 - 0.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.25 - 0.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.75 - 1.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.25 - 1.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(1.75 - 2.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.25 - 2.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2.75 - 3.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.25 - 3.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(3.75 - 4.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.25 - 4.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(4.75 - 5.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.25 - 5.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5.75 - 6.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6.25 - 6.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hs (m)	(6.75 - 7.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5()	(7.25 - 7.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(7.75 - 8.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.25 - 8.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(8.75 - 9.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.25 - 9.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9.75 - 10.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.25 - 10.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(10.75 - 11.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.25 - 11.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(11.75 - 12.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.25 - 12.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(12.75 - 13.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.25 - 13.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(13.75 - 14.25)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(14.25 - 14.75)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	cumulative sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

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