

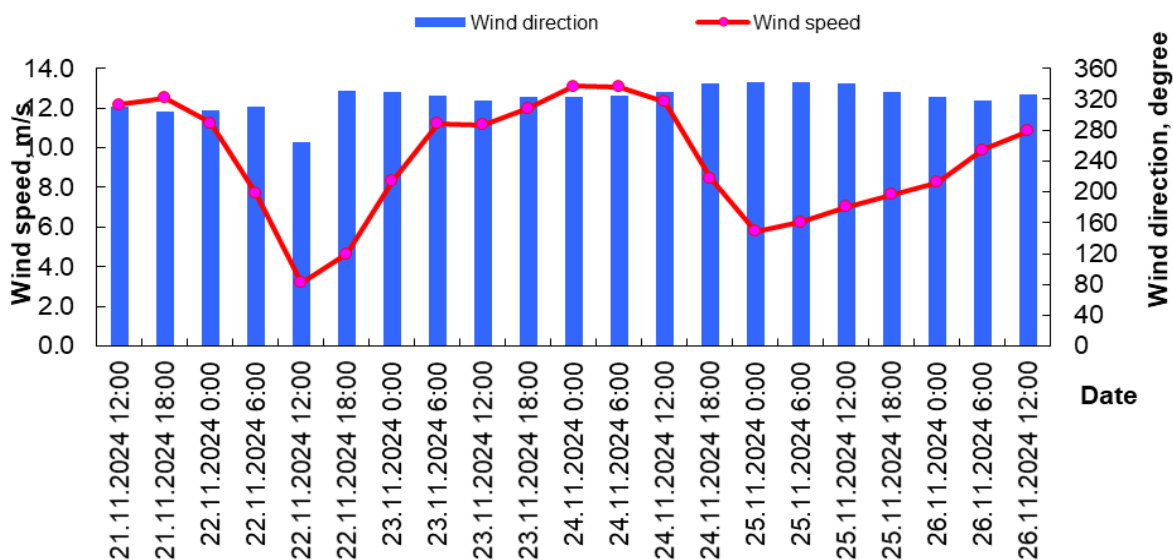


MINISTRY OF ECOLOGY AND NATURAL RESOURCES  
OF THE REPUBLIC OF KAZAKHSTAN

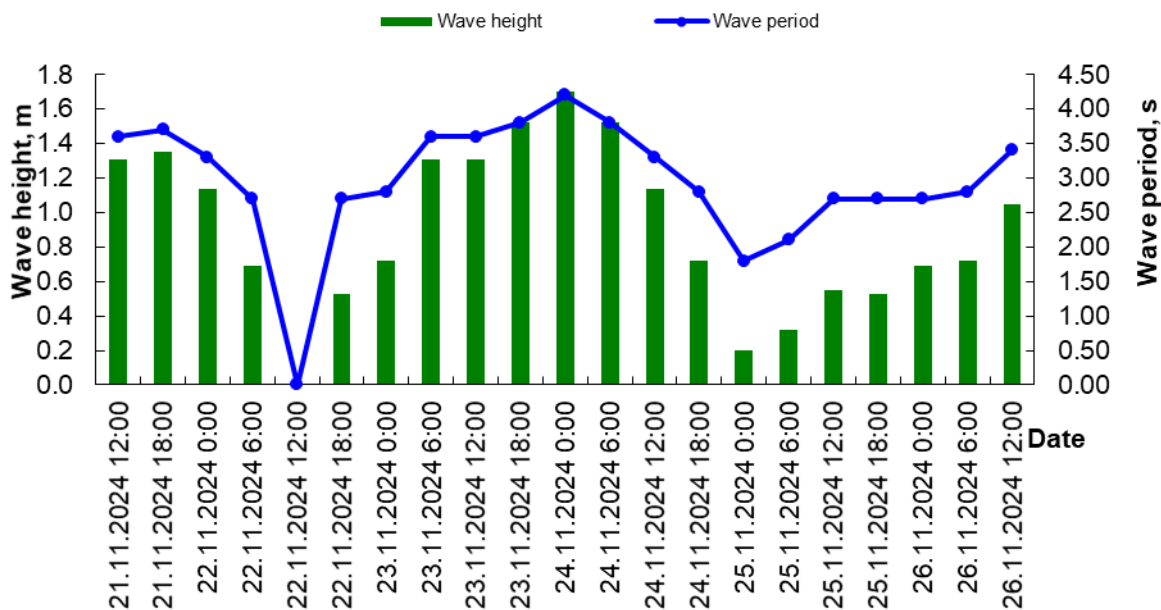
RSE «KAZHYDROMET»

Wave and wind forecast for the Middle part of the Caspian Sea with a 5-day  
advance for the period November 21 – 26, 2024

Wind condition in the 21050 unit

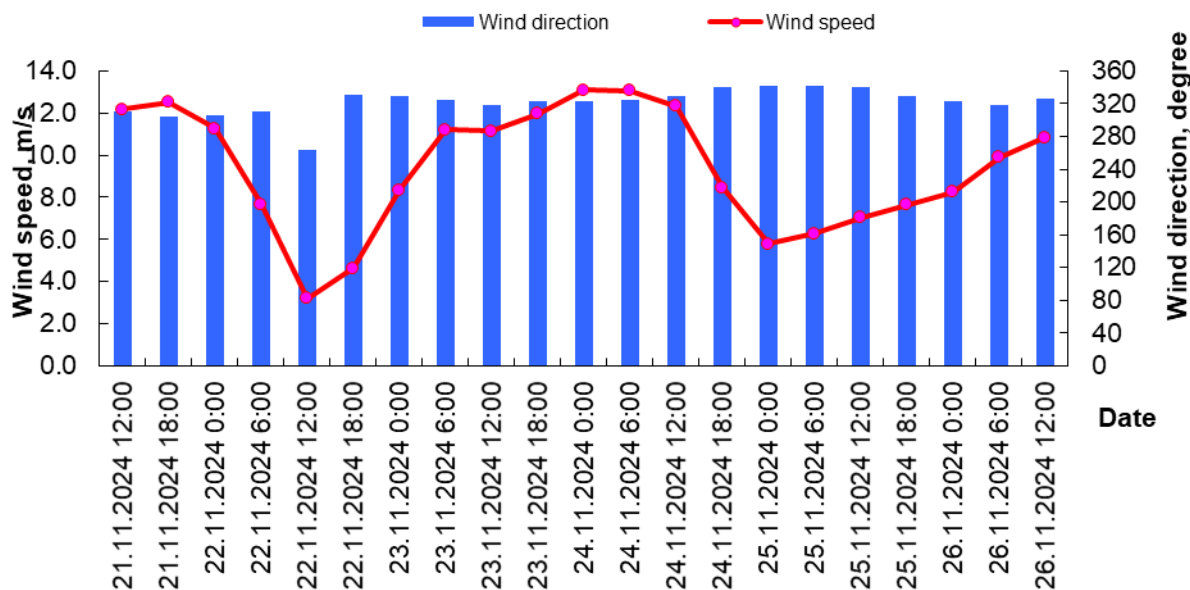


Wave condition in the 21050 unit

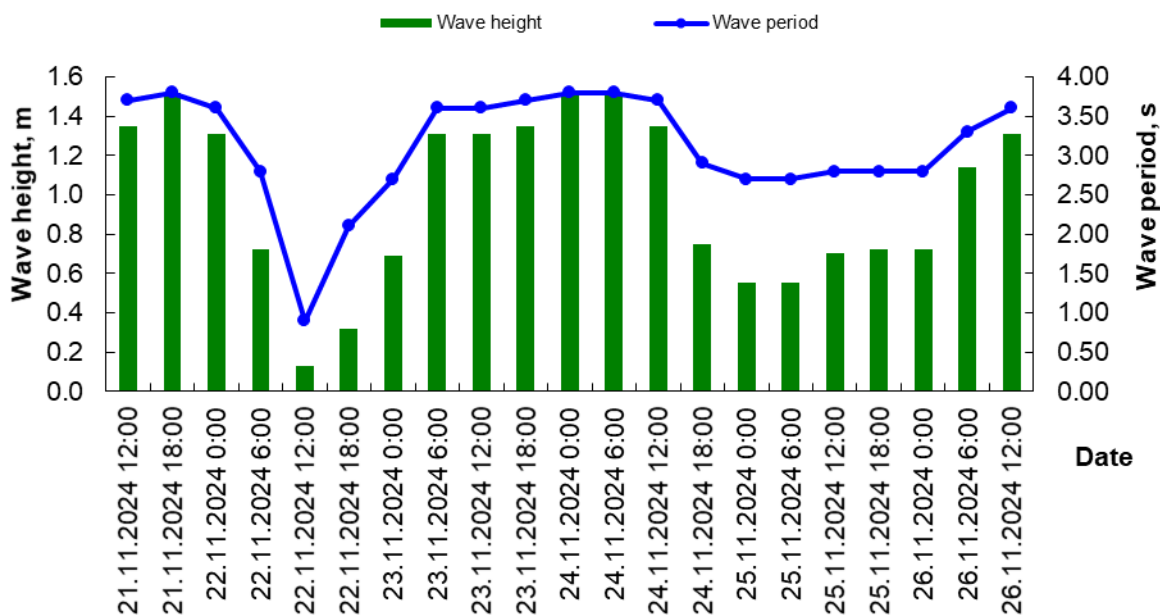


Date Time	Wind speed (WS) and wind direction (WD)		Wave height (H) and wave period ( $\tau$ )	
	WS, m/s	WD, rumb	H, m	t, s
21.11.2024 12:00	11	NW	1.31	3.60
21.11.2024 18:00	12	NW	1.35	3.70
22.11.2024 0:00	10	NW	1.14	3.30
22.11.2024 6:00	7	NW	0.69	2.70
22.11.2024 12:00	1	W	0.00	0.00
22.11.2024 18:00	6	NW	0.53	2.70
23.11.2024 0:00	8	NW	0.72	2.80
23.11.2024 6:00	11	NW	1.31	3.60
23.11.2024 12:00	11	NW	1.31	3.60
23.11.2024 18:00	13	NW	1.52	3.80
24.11.2024 0:00	14	NW	1.70	4.20
24.11.2024 6:00	13	NW	1.52	3.80
24.11.2024 12:00	10	NW	1.14	3.30
24.11.2024 18:00	8	N	0.72	2.80
25.11.2024 0:00	4	N	0.20	1.80
25.11.2024 6:00	5	N	0.32	2.10
25.11.2024 12:00	6	N	0.55	2.70
25.11.2024 18:00	6	NW	0.53	2.70
26.11.2024 0:00	7	NW	0.69	2.70
26.11.2024 6:00	8	NW	0.72	2.80
26.11.2024 12:00	9	NW	1.05	3.40

### Wind condition in the 21141 unit

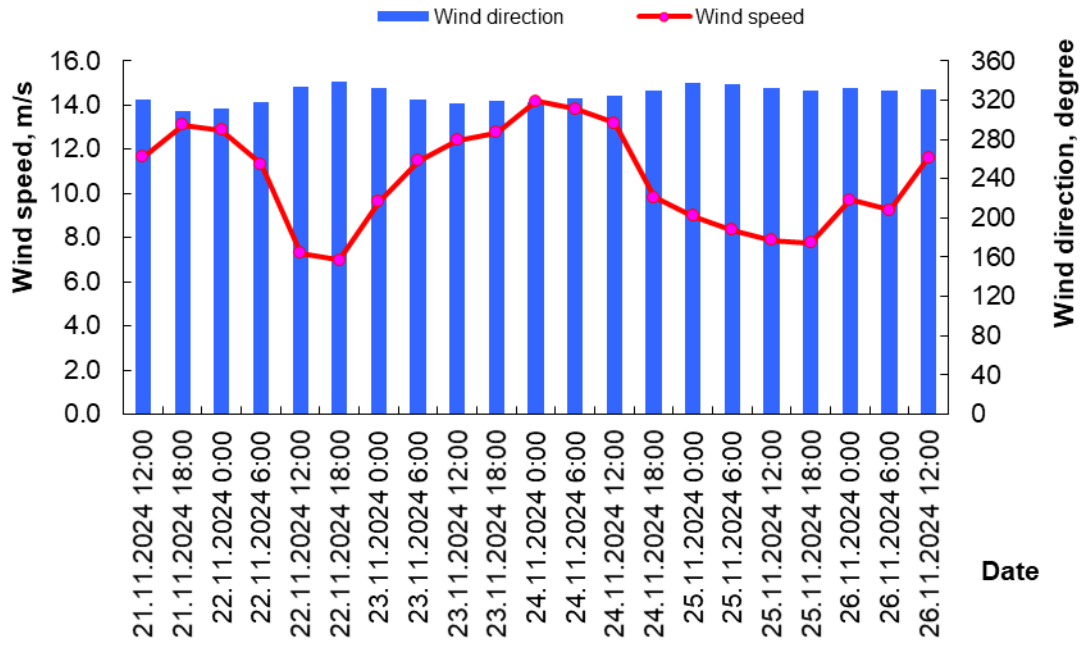


### Wave condition in the 21141 unit

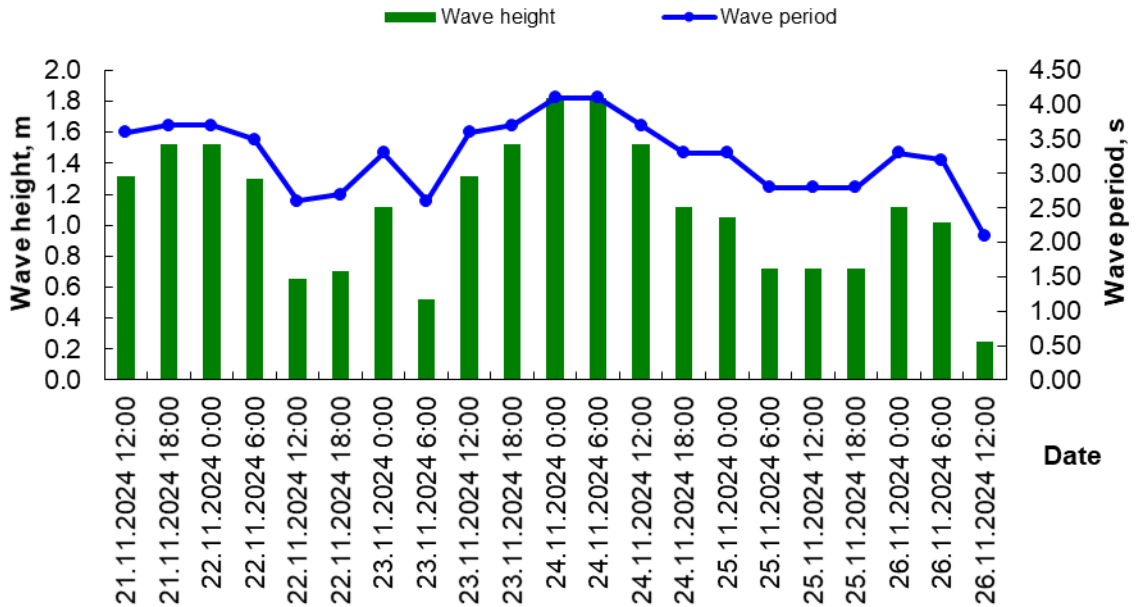


Date Time	Wind speed (WS) and wind direction (WD)		Wave height (H) and wave period ( $\tau$ )	
	WS, m/s	WD, rumb	H, m	t, s
21.11.2024 12:00	12	NW	1.35	3.70
21.11.2024 18:00	13	NW	1.52	3.80
22.11.2024 0:00	11	NW	1.31	3.60
22.11.2024 6:00	8	NW	0.72	2.80
22.11.2024 12:00	3	W	0.13	0.90
22.11.2024 18:00	5	NW	0.32	2.10
23.11.2024 0:00	7	NW	0.69	2.70
23.11.2024 6:00	11	NW	1.31	3.60
23.11.2024 12:00	11	NW	1.31	3.60
23.11.2024 18:00	12	NW	1.35	3.70
24.11.2024 0:00	13	NW	1.52	3.80
24.11.2024 6:00	13	NW	1.52	3.80
24.11.2024 12:00	12	NW	1.35	3.70
24.11.2024 18:00	8	N	0.75	2.90
25.11.2024 0:00	6	N	0.55	2.70
25.11.2024 6:00	6	N	0.55	2.70
25.11.2024 12:00	7	N	0.70	2.80
25.11.2024 18:00	8	NW	0.72	2.80
26.11.2024 0:00	8	NW	0.72	2.80
26.11.2024 6:00	10	NW	1.14	3.30
26.11.2024 12:00	11	NW	1.31	3.60

### Wind condition in the 21142 unit

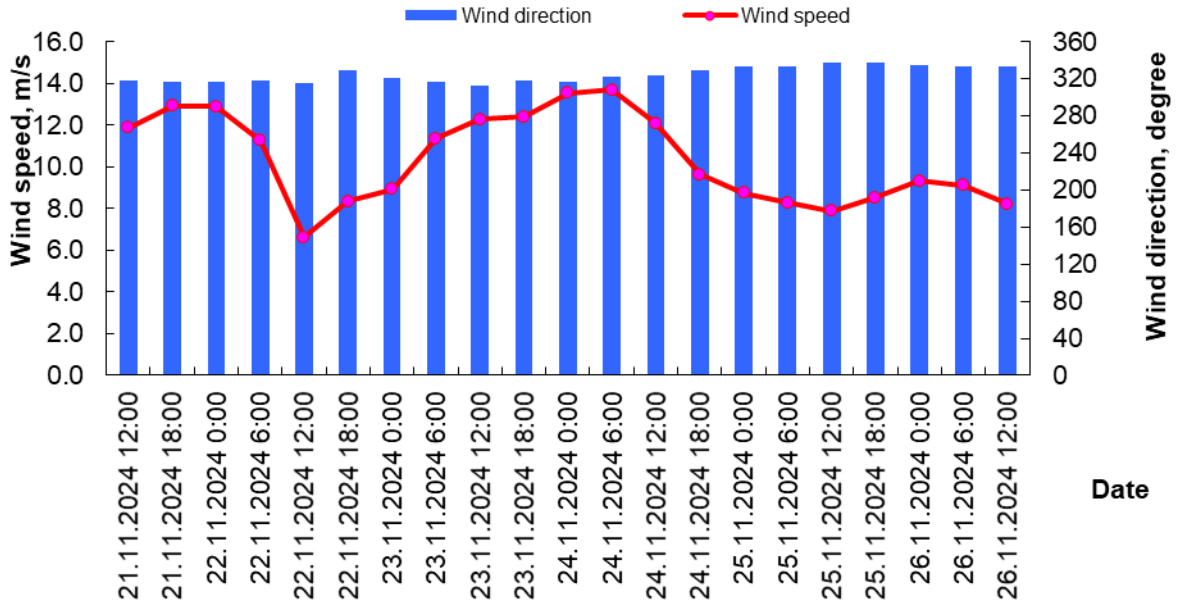


### Wave condition in the 21142 unit

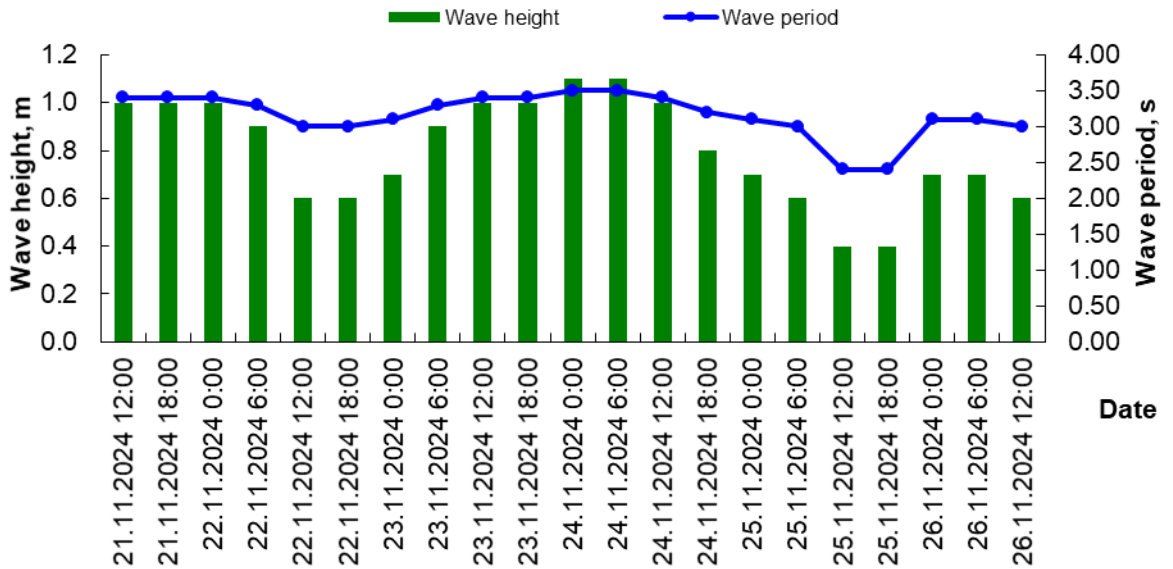


Date Time	Wind speed (WS) and wind direction (WD)		Wave height (H) and wave period ( $\tau$ )	
	WS, m/s	WD, rumb	H, m	t, s
21.11.2024 12:00	12	NW	1.32	3.60
21.11.2024 18:00	13	NW	1.52	3.70
22.11.2024 0:00	13	NW	1.52	3.70
22.11.2024 6:00	11	NW	1.30	3.50
22.11.2024 12:00	7	NW	0.65	2.60
22.11.2024 18:00	7	N	0.70	2.70
23.11.2024 0:00	10	NW	1.12	3.30
23.11.2024 6:00	6	NW	0.52	2.60
23.11.2024 12:00	12	NW	1.32	3.60
23.11.2024 18:00	13	NW	1.52	3.70
24.11.2024 0:00	14	NW	1.82	4.10
24.11.2024 6:00	14	NW	1.82	4.10
24.11.2024 12:00	13	NW	1.52	3.70
24.11.2024 18:00	10	NW	1.12	3.30
25.11.2024 0:00	9	N	1.05	3.30
25.11.2024 6:00	8	NW	0.72	2.80
25.11.2024 12:00	8	NW	0.72	2.80
25.11.2024 18:00	8	NW	0.72	2.80
26.11.2024 0:00	10	NW	1.12	3.30
26.11.2024 6:00	9	NW	1.02	3.20
26.11.2024 12:00	5	NW	0.25	2.10

### Wind condition in the Bautino Bay



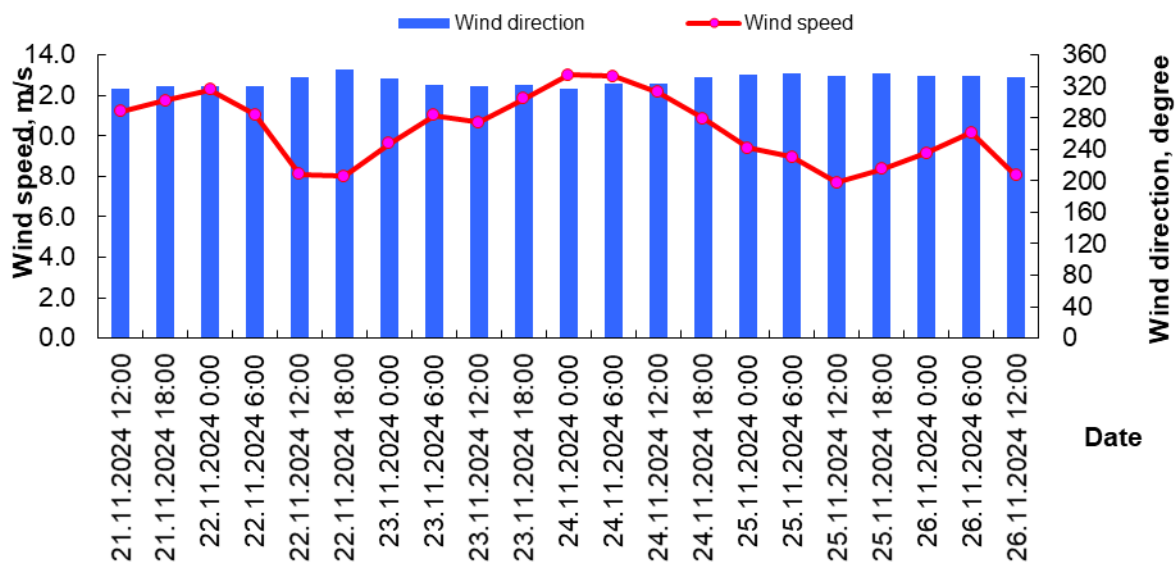
### Wave condition in the Bautino Bay



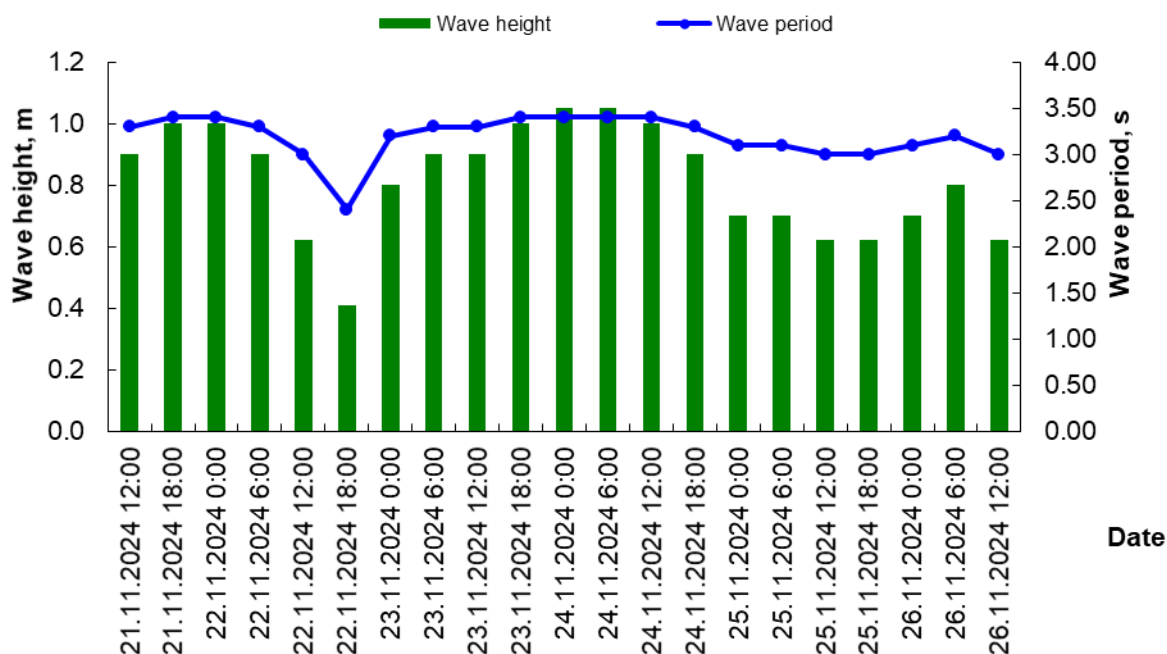
Date Time	Wind speed (WS) and wind direction (WD)		Wave height (H) and wave period ( $\tau$ )	
	WS, m/s	WD, rumb	H, m	t, s
	21.11.2024 12:00	12	NW	1.00
21.11.2024 18:00	13	NW	1.00	3.40
22.11.2024 0:00	13	NW	1.00	3.40
22.11.2024 6:00	11	NW	0.90	3.30
22.11.2024 12:00	7	NW	0.60	3.00
22.11.2024 18:00	8	NW	0.60	3.00
23.11.2024 0:00	9	NW	0.70	3.10
23.11.2024 6:00	11	NW	0.90	3.30
23.11.2024 12:00	12	NW	1.00	3.40
23.11.2024 18:00	12	NW	1.00	3.40
24.11.2024 0:00	14	NW	1.10	3.50
24.11.2024 6:00	14	NW	1.10	3.50
24.11.2024 12:00	12	NW	1.00	3.40
24.11.2024 18:00	10	NW	0.80	3.20
25.11.2024 0:00	9	NW	0.70	3.10
25.11.2024 6:00	8	NW	0.60	3.00
25.11.2024 12:00	8	N	0.40	2.40
25.11.2024 18:00	9	N	0.40	2.40
26.11.2024 0:00	9	NW	0.70	3.10
26.11.2024 6:00	9	NW	0.70	3.10
26.11.2024 12:00	8	NW	0.60	3.00



### Wind condition in the Kuryik Bay



### Wave condition in the Kuryik Bay



Date Time	Wind speed (WS) and wind direction (WD)		Wave height (H) and wave period ( $\tau$ )	
	WS, m/s	WD, rumb	H, m	t, s
21.11.2024 12:00	11	NW	0.90	3.30
21.11.2024 18:00	12	NW	1.00	3.40
22.11.2024 0:00	12	NW	1.00	3.40
22.11.2024 6:00	11	NW	0.90	3.30
22.11.2024 12:00	8	NW	0.62	3.00
22.11.2024 18:00	8	N	0.41	2.40
23.11.2024 0:00	10	NW	0.80	3.20
23.11.2024 6:00	11	NW	0.90	3.30
23.11.2024 12:00	11	NW	0.90	3.30
23.11.2024 18:00	12	NW	1.00	3.40
24.11.2024 0:00	13	NW	1.05	3.40
24.11.2024 6:00	13	NW	1.05	3.40
24.11.2024 12:00	12	NW	1.00	3.40
24.11.2024 18:00	11	NW	0.90	3.30
25.11.2024 0:00	9	NW	0.70	3.10
25.11.2024 6:00	9	NW	0.70	3.10
25.11.2024 12:00	8	NW	0.62	3.00
25.11.2024 18:00	8	NW	0.62	3.00
26.11.2024 0:00	9	NW	0.70	3.10
26.11.2024 6:00	10	NW	0.80	3.20
26.11.2024 12:00	8	NW	0.62	3.00

Made by: Zhagparova N.N.

Checked by: Shishkina G.