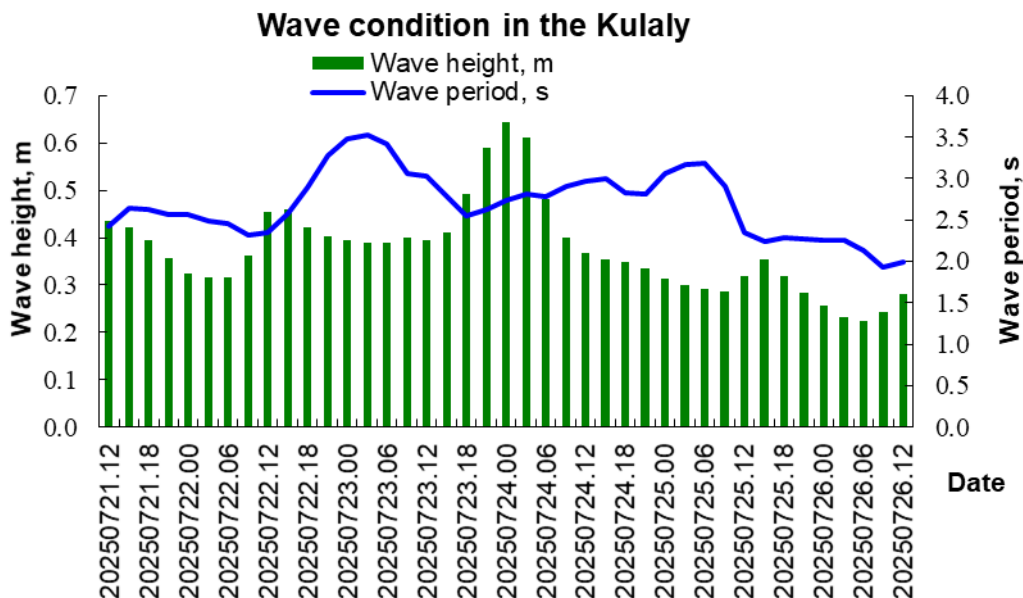
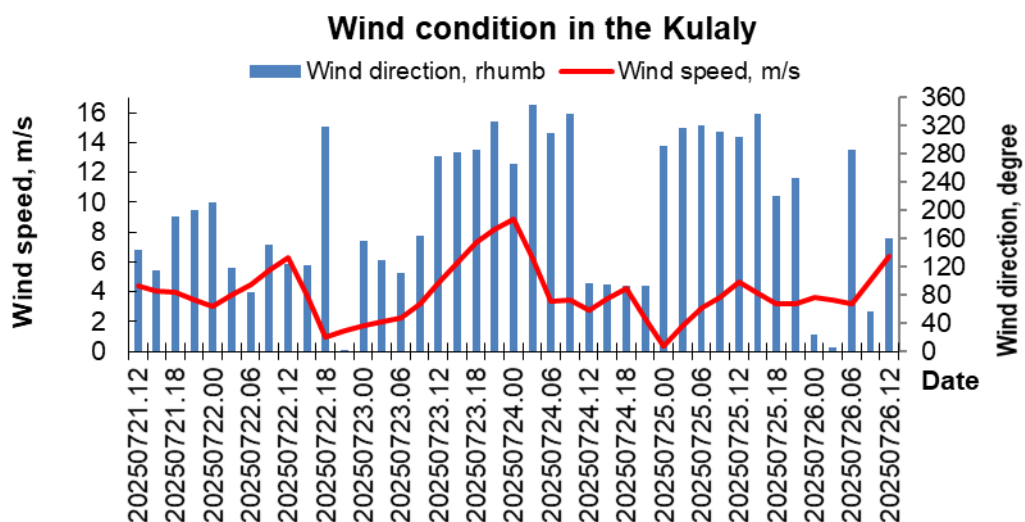




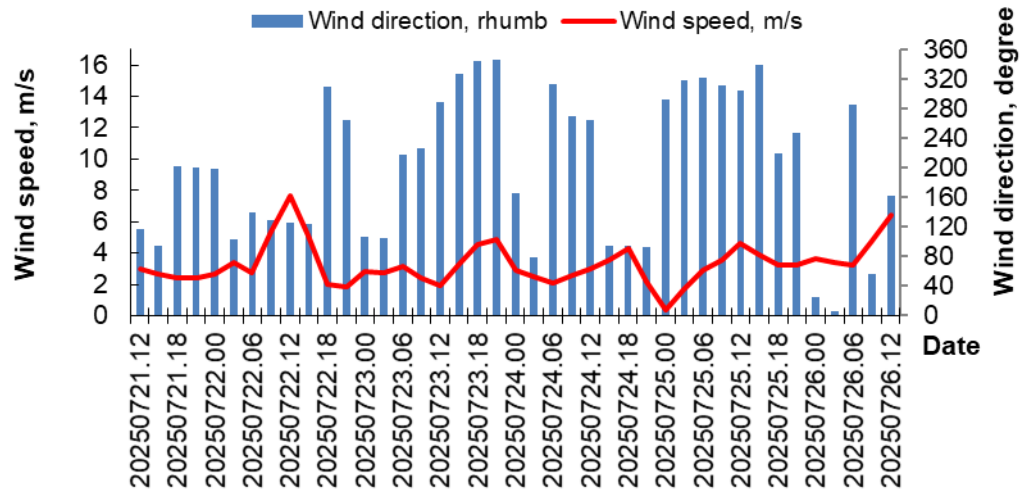
**MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN
RSE «KAZHYDROMET»**

**Wave and wind forecast for the Kazakhstan part of the Caspian Sea with a 5-day advance
using SWAN spectral model for the period July 21 – 26, 2025.**

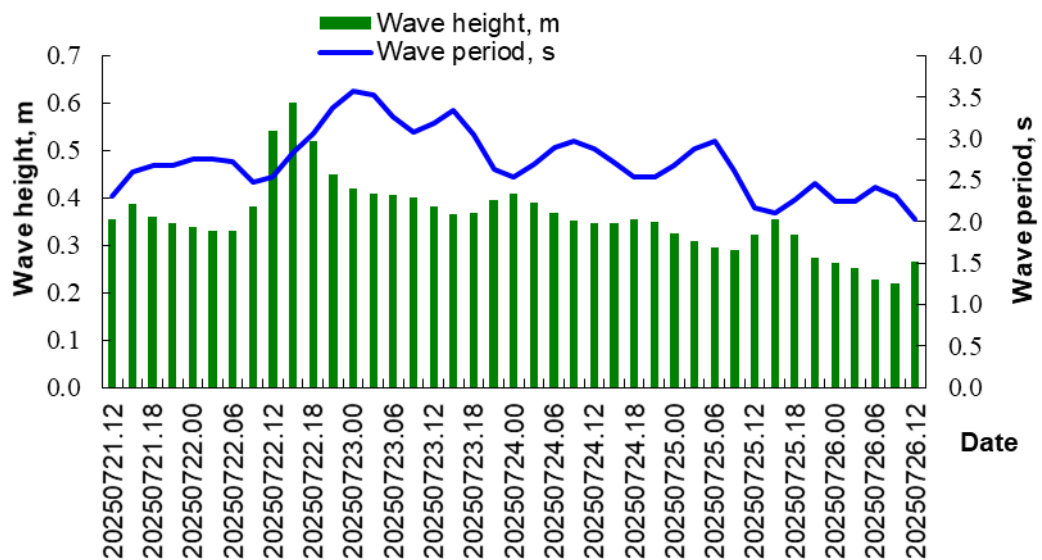


Date time	Kulaly				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.44	NW	2.4	4	SE
20250721.15	0.42	W	2.6	4	SE
20250721.18	0.39	W	2.6	4	S
20250721.21	0.36	W	2.6	3	S
20250722.00	0.33	NW	2.6	3	SW
20250722.03	0.32	NW	2.5	4	SE
20250722.06	0.32	NW	2.5	4	E
20250722.09	0.36	NW	2.3	5	SE
20250722.12	0.45	NW	2.4	6	SE
20250722.15	0.46	NW	2.6	4	SE
20250722.18	0.42	NW	2.9	1	NW
20250722.21	0.40	N	3.3	1	N
20250723.00	0.39	N	3.5	2	SE
20250723.03	0.39	NE	3.5	2	SE
20250723.06	0.39	NE	3.4	2	E
20250723.09	0.40	NE	3.1	3	S
20250723.12	0.39	E	3.0	5	W
20250723.15	0.41	E	2.8	6	W
20250723.18	0.49	E	2.5	7	W
20250723.21	0.59	SE	2.6	8	NW
20250724.00	0.64	SE	2.7	9	W
20250724.03	0.61	SE	2.8	6	N
20250724.06	0.48	SE	2.8	3	NW
20250724.09	0.40	SE	2.9	3	N
20250724.12	0.37	SE	3.0	3	E
20250724.15	0.35	SE	3.0	4	E
20250724.18	0.35	SE	2.8	4	E
20250724.21	0.34	S	2.8	2	E
20250725.00	0.31	S	3.1	0	W
20250725.03	0.30	S	3.2	2	NW
20250725.06	0.29	S	3.2	3	NW
20250725.09	0.29	S	2.9	4	NW
20250725.12	0.32	SE	2.3	5	NW
20250725.15	0.35	SE	2.2	4	N
20250725.18	0.32	SE	2.3	3	SW
20250725.21	0.28	S	2.3	3	SW
20250726.00	0.26	SE	2.3	4	NE
20250726.03	0.23	SE	2.3	3	N
20250726.06	0.22	E	2.1	3	W
20250726.09	0.24	E	1.9	5	NE
20250726.12	0.28	NE	2.0	6	S

Wind condition in the Fort-Shevchenko

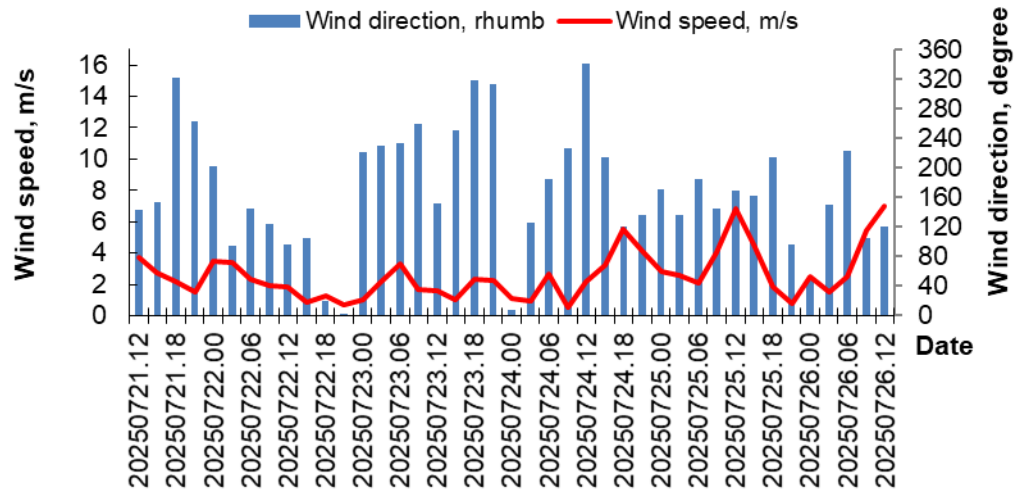


Wave condition in the Fort-Shevchenko

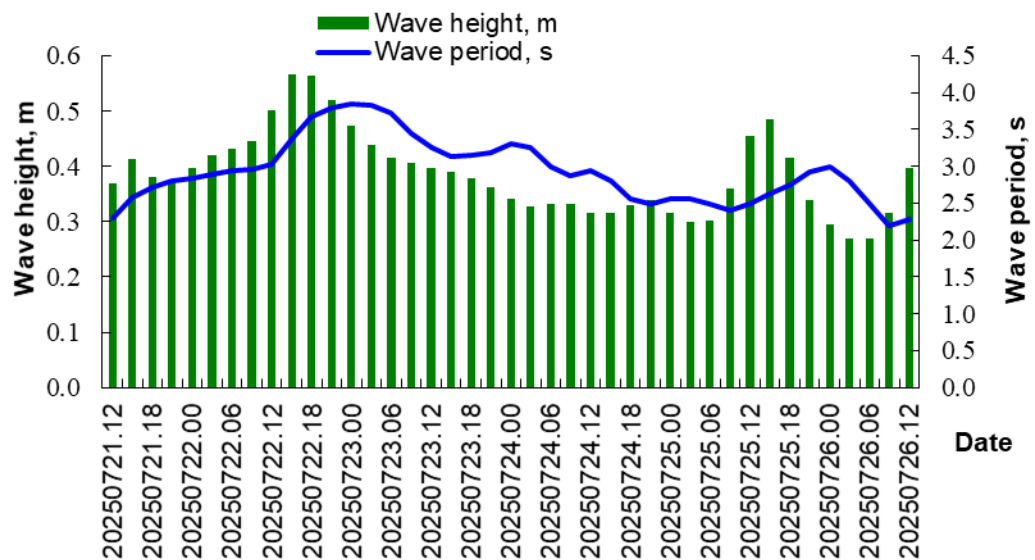


Date time	Fort-Shevchenko				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.36	NW	2.3	3	SE
20250721.15	0.39	NW	2.6	3	E
20250721.18	0.36	NW	2.7	2	S
20250721.21	0.35	NW	2.7	2	S
20250722.00	0.34	NW	2.8	3	S
20250722.03	0.33	NW	2.8	3	E
20250722.06	0.33	NW	2.7	3	SE
20250722.09	0.38	NW	2.5	5	SE
20250722.12	0.54	NW	2.5	8	SE
20250722.15	0.60	NW	2.8	5	SE
20250722.18	0.52	NW	3.1	2	NW
20250722.21	0.45	N	3.4	2	W
20250723.00	0.42	N	3.6	3	E
20250723.03	0.41	NE	3.5	3	E
20250723.06	0.41	NE	3.3	3	SW
20250723.09	0.40	NE	3.1	2	SW
20250723.12	0.38	E	3.2	2	W
20250723.15	0.37	E	3.3	3	NW
20250723.18	0.37	E	3.1	5	N
20250723.21	0.40	SE	2.6	5	N
20250724.00	0.41	SE	2.5	3	S
20250724.03	0.39	SE	2.7	3	E
20250724.06	0.37	SE	2.9	2	NW
20250724.09	0.35	SE	3.0	3	W
20250724.12	0.35	SE	2.9	3	W
20250724.15	0.35	SE	2.7	4	E
20250724.18	0.36	S	2.5	4	E
20250724.21	0.35	S	2.5	2	E
20250725.00	0.32	S	2.7	0	W
20250725.03	0.31	S	2.9	2	NW
20250725.06	0.29	S	3.0	3	NW
20250725.09	0.29	S	2.6	4	NW
20250725.12	0.32	E	2.2	5	NW
20250725.15	0.35	NE	2.1	4	N
20250725.18	0.32	N	2.3	3	SW
20250725.21	0.27	N	2.5	3	SW
20250726.00	0.26	N	2.2	4	NE
20250726.03	0.25	N	2.3	3	N
20250726.06	0.23	N	2.4	3	W
20250726.09	0.22	N	2.3	5	NE
20250726.12	0.27	N	2.0	6	S

Wind condition in the Aktau

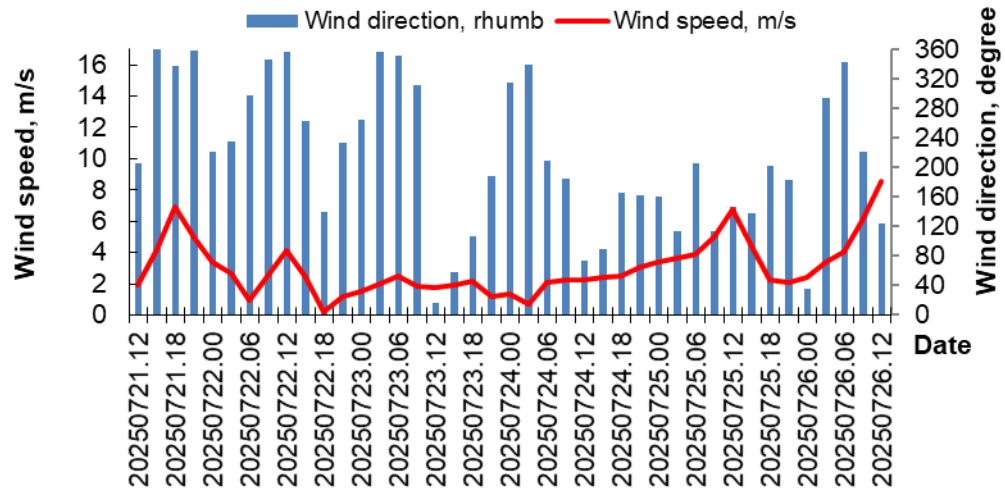


Wave condition in the Aktau

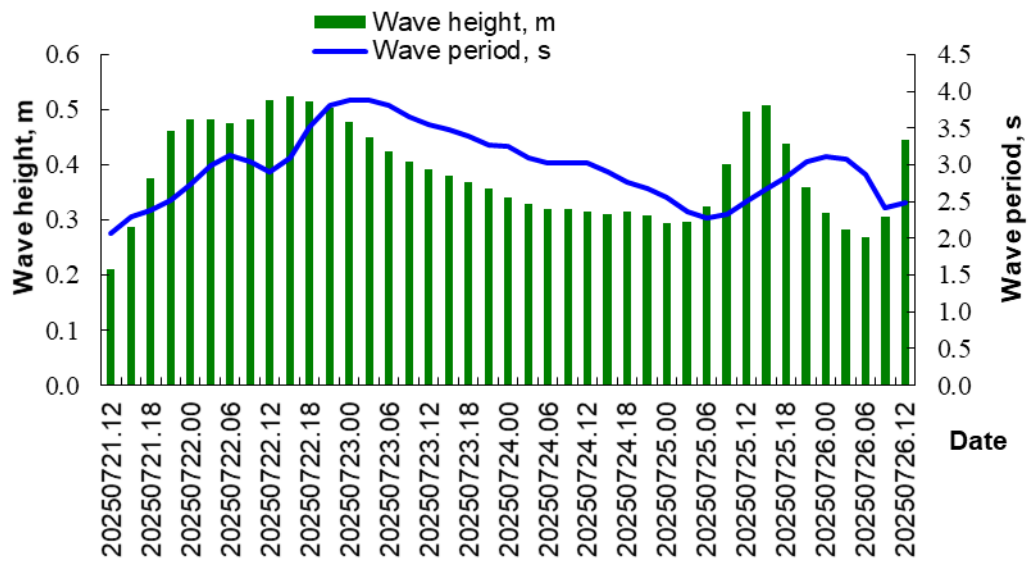


Date time	Aktau				
	Wave height, m	Направление волны, румб	Wave height, m	Скорость ветра, м/с	Wave height, m
20250721.12	0.37	NW	2.3	4	SE
20250721.15	0.41	NW	2.6	3	SE
20250721.18	0.38	NW	2.7	2	NW
20250721.21	0.38	NW	2.8	2	W
20250722.00	0.40	W	2.8	3	S
20250722.03	0.42	W	2.9	3	E
20250722.06	0.43	W	2.9	2	SE
20250722.09	0.45	NW	3.0	2	SE
20250722.12	0.50	NW	3.0	2	E
20250722.15	0.57	NW	3.4	1	E
20250722.18	0.57	NW	3.7	1	N
20250722.21	0.52	NW	3.8	1	N
20250723.00	0.47	N	3.8	1	SW
20250723.03	0.44	N	3.8	2	SW
20250723.06	0.42	NE	3.7	3	SW
20250723.09	0.41	NE	3.4	2	W
20250723.12	0.40	NE	3.3	2	SE
20250723.15	0.39	E	3.1	1	W
20250723.18	0.38	E	3.1	2	NW
20250723.21	0.36	E	3.2	2	NW
20250724.00	0.34	E	3.3	1	N
20250724.03	0.33	E	3.2	1	SE
20250724.06	0.33	SE	3.0	3	S
20250724.09	0.33	SE	2.9	1	SW
20250724.12	0.32	SE	2.9	2	N
20250724.15	0.32	S	2.8	3	SW
20250724.18	0.33	S	2.6	5	SE
20250724.21	0.34	SW	2.5	4	SE
20250725.00	0.32	SW	2.6	3	S
20250725.03	0.30	SW	2.6	3	SE
20250725.06	0.30	SW	2.5	2	S
20250725.09	0.36	W	2.4	4	SE
20250725.12	0.45	W	2.5	7	S
20250725.15	0.48	NW	2.6	5	S
20250725.18	0.42	NW	2.8	2	SW
20250725.21	0.34	NW	2.9	1	E
20250726.00	0.29	NW	3.0	3	NE
20250726.03	0.27	NW	2.8	2	SE
20250726.06	0.27	NW	2.5	2	SW
20250726.09	0.32	W	2.2	5	E
20250726.12	0.40	NW	2.3	7	SE

Wind condition in the Peschanyi

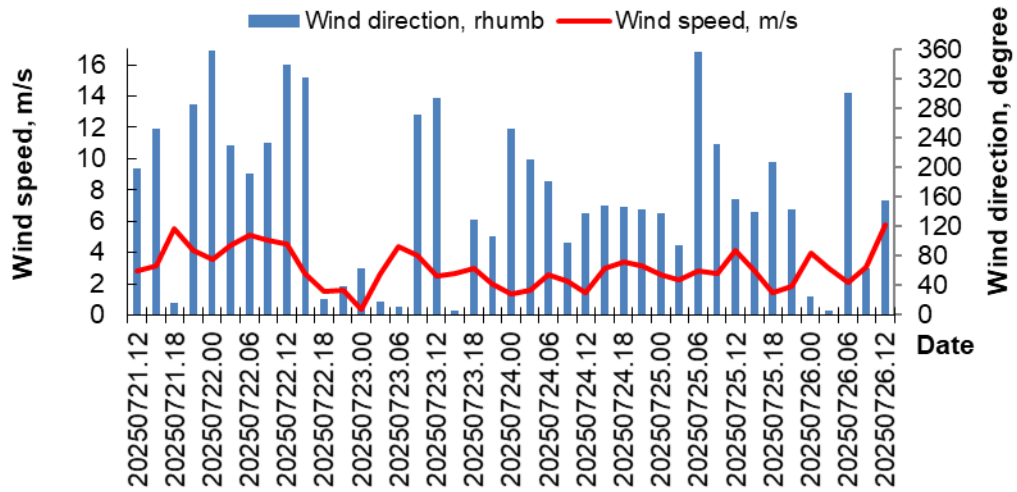


Wave condition in the Peschanyi

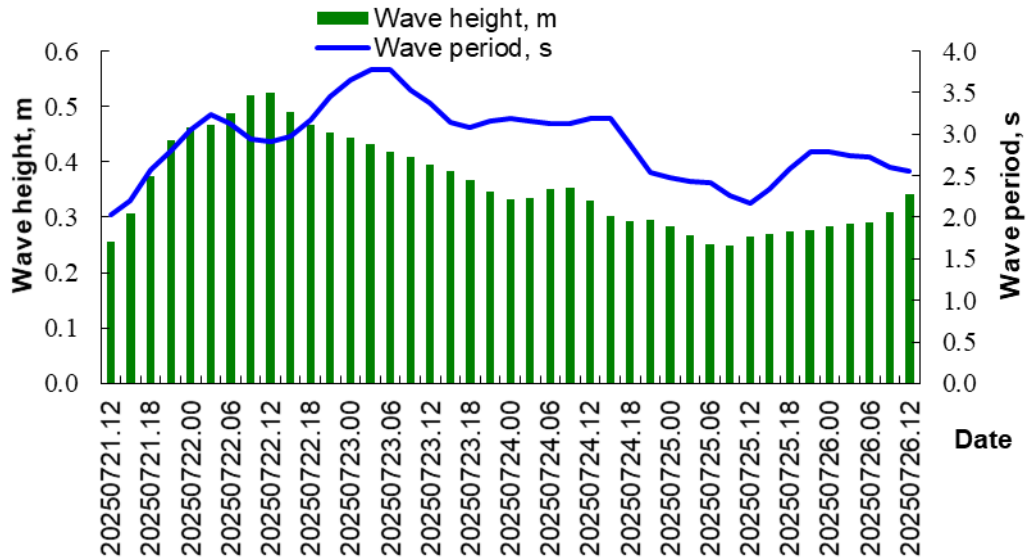


Date time	Peschanyi (Isan)				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.21	W	2.1	2	SW
20250721.15	0.29	W	2.3	4	N
20250721.18	0.38	SW	2.4	7	N
20250721.21	0.46	S	2.5	5	N
20250722.00	0.48	S	2.7	3	SW
20250722.03	0.48	SW	3.0	3	SW
20250722.06	0.48	SW	3.1	1	NW
20250722.09	0.48	SW	3.1	3	N
20250722.12	0.52	S	2.9	4	N
20250722.15	0.52	S	3.1	2	W
20250722.18	0.52	W	3.5	0	SE
20250722.21	0.50	NW	3.8	1	SW
20250723.00	0.48	N	3.9	1	W
20250723.03	0.45	N	3.9	2	N
20250723.06	0.42	NE	3.8	2	N
20250723.09	0.41	NE	3.6	2	NW
20250723.12	0.39	NE	3.5	2	N
20250723.15	0.38	E	3.5	2	NE
20250723.18	0.37	E	3.4	2	E
20250723.21	0.36	E	3.3	1	S
20250724.00	0.34	E	3.3	1	NW
20250724.03	0.33	E	3.1	1	N
20250724.06	0.32	E	3.0	2	SW
20250724.09	0.32	SE	3.0	2	S
20250724.12	0.31	S	3.0	2	E
20250724.15	0.31	S	2.9	2	E
20250724.18	0.31	SW	2.8	2	S
20250724.21	0.31	SW	2.7	3	S
20250725.00	0.29	SW	2.6	3	S
20250725.03	0.30	W	2.4	4	SE
20250725.06	0.32	W	2.3	4	SW
20250725.09	0.40	W	2.3	5	SE
20250725.12	0.50	W	2.5	7	SE
20250725.15	0.51	NW	2.7	4	SE
20250725.18	0.44	NW	2.8	2	S
20250725.21	0.36	NW	3.0	2	S
20250726.00	0.31	NW	3.1	2	NE
20250726.03	0.28	NW	3.1	3	NW
20250726.06	0.27	NW	2.9	4	N
20250726.09	0.31	W	2.4	6	SW
20250726.12	0.45	W	2.5	9	SE

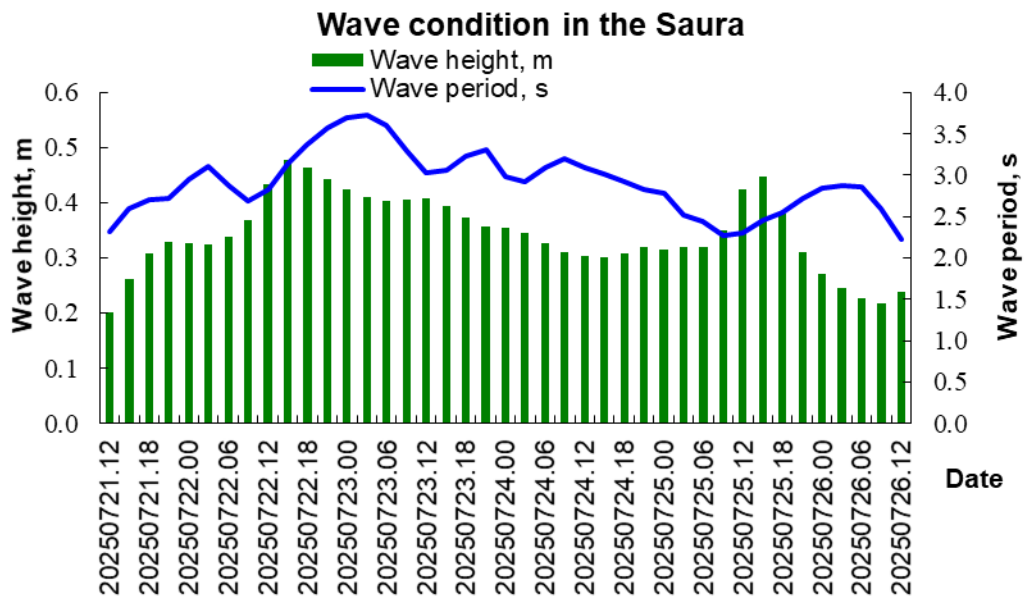
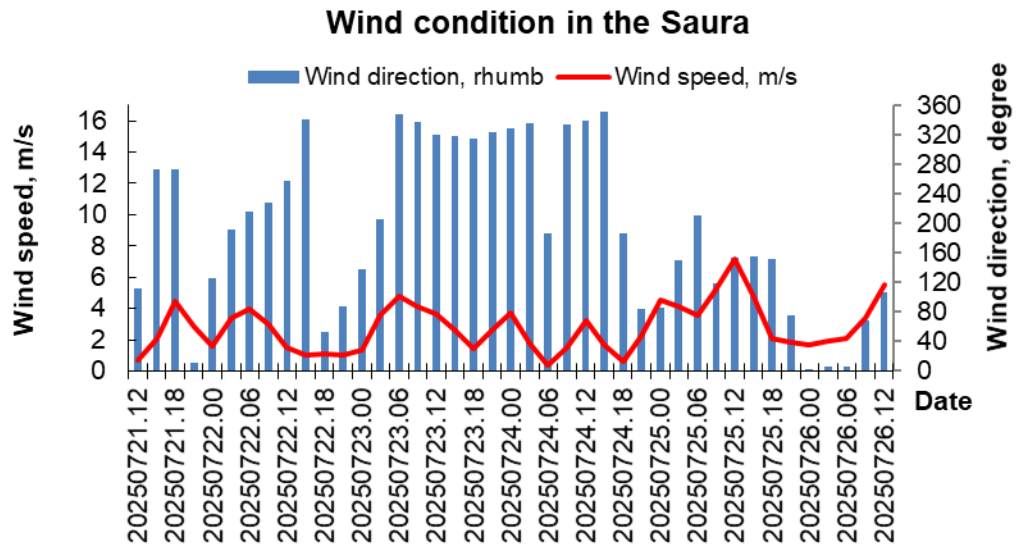
Wind condition in the Fetisovo



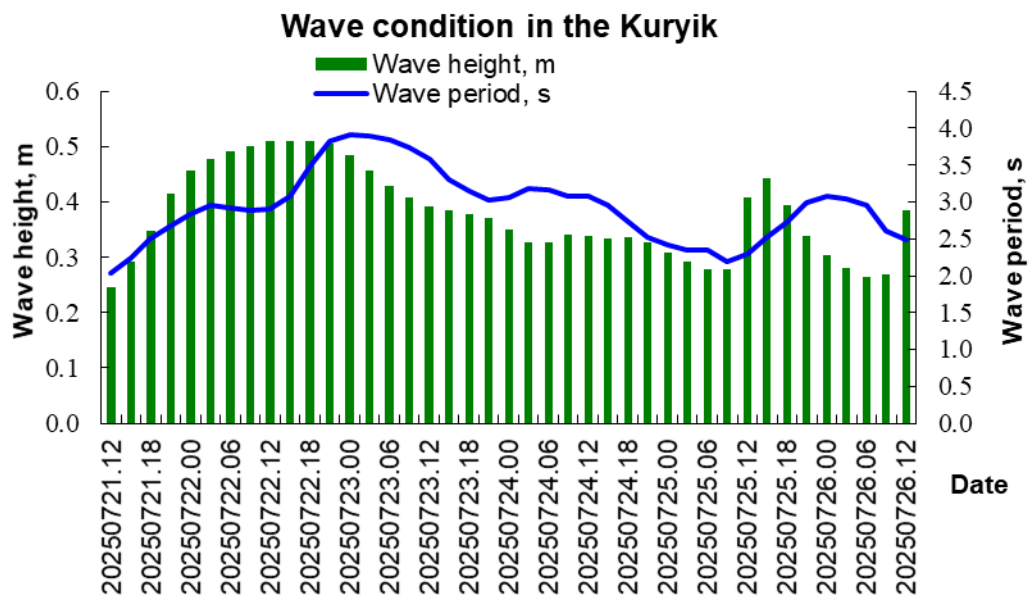
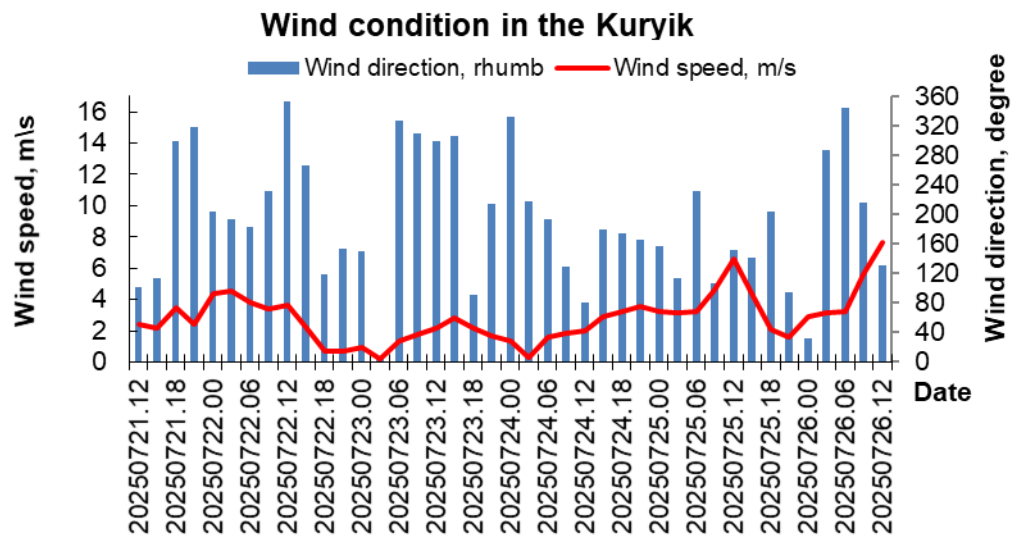
Wave condition in the Fetisovo



Date time	Fetisovo				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.26	W	2.0	3	S
20250721.15	0.31	W	2.2	3	W
20250721.18	0.37	W	2.6	5	N
20250721.21	0.44	SW	2.8	4	W
20250722.00	0.46	SW	3.1	4	N
20250722.03	0.47	SW	3.2	4	SW
20250722.06	0.49	SW	3.1	5	S
20250722.09	0.52	SW	2.9	5	SW
20250722.12	0.53	S	2.9	5	N
20250722.15	0.49	SE	3.0	3	NW
20250722.18	0.47	NE	3.2	2	N
20250722.21	0.45	NE	3.5	2	NE
20250723.00	0.44	N	3.6	0	NE
20250723.03	0.43	N	3.8	3	N
20250723.06	0.42	N	3.8	4	N
20250723.09	0.41	NE	3.5	4	W
20250723.12	0.39	NE	3.4	2	NW
20250723.15	0.38	NE	3.1	3	N
20250723.18	0.37	NE	3.1	3	SE
20250723.21	0.35	NE	3.2	2	E
20250724.00	0.33	NE	3.2	1	W
20250724.03	0.33	E	3.2	2	SW
20250724.06	0.35	S	3.1	3	S
20250724.09	0.35	SW	3.1	2	E
20250724.12	0.33	SW	3.2	1	SE
20250724.15	0.30	SW	3.2	3	SE
20250724.18	0.29	SW	2.9	3	SE
20250724.21	0.30	W	2.5	3	SE
20250725.00	0.28	W	2.5	3	SE
20250725.03	0.27	W	2.4	2	E
20250725.06	0.25	W	2.4	3	N
20250725.09	0.25	W	2.3	3	SW
20250725.12	0.26	W	2.2	4	SE
20250725.15	0.27	NW	2.3	3	SE
20250725.18	0.27	NW	2.6	1	SW
20250725.21	0.28	NW	2.8	2	SE
20250726.00	0.28	NW	2.8	4	NE
20250726.03	0.29	NW	2.7	3	N
20250726.06	0.29	NW	2.7	2	NW
20250726.09	0.31	W	2.6	3	NE
20250726.12	0.34	NW	2.6	6	SE



Date time	Saura				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.20	NW	2.3	1	E
20250721.15	0.26	NW	2.6	2	W
20250721.18	0.31	W	2.7	4	W
20250721.21	0.33	W	2.7	3	N
20250722.00	0.33	NW	3.0	2	SE
20250722.03	0.33	NW	3.1	3	S
20250722.06	0.34	NW	2.9	4	SW
20250722.09	0.37	NW	2.7	3	SW
20250722.12	0.43	NW	2.8	2	W
20250722.15	0.48	NW	3.1	1	N
20250722.18	0.46	NW	3.4	1	NE
20250722.21	0.44	N	3.6	1	E
20250723.00	0.42	N	3.7	1	SE
20250723.03	0.41	NE	3.7	4	SW
20250723.06	0.40	NE	3.6	5	N
20250723.09	0.40	NE	3.3	4	NW
20250723.12	0.41	E	3.0	4	NW
20250723.15	0.39	E	3.1	3	NW
20250723.18	0.37	E	3.2	1	NW
20250723.21	0.36	E	3.3	3	NW
20250724.00	0.35	E	3.0	4	NW
20250724.03	0.35	SE	2.9	2	NW
20250724.06	0.33	SE	3.1	0	S
20250724.09	0.31	SE	3.2	2	NW
20250724.12	0.30	SE	3.1	3	N
20250724.15	0.30	SE	3.0	2	N
20250724.18	0.31	S	2.9	1	S
20250724.21	0.32	S	2.8	2	E
20250725.00	0.32	S	2.8	5	E
20250725.03	0.32	SW	2.5	4	SE
20250725.06	0.32	SW	2.4	4	SW
20250725.09	0.35	W	2.3	5	SE
20250725.12	0.42	NW	2.3	7	SE
20250725.15	0.45	NW	2.5	5	SE
20250725.18	0.38	NW	2.6	2	SE
20250725.21	0.31	NW	2.7	2	E
20250726.00	0.27	NW	2.8	2	N
20250726.03	0.25	NW	2.9	2	N
20250726.06	0.23	N	2.9	2	N
20250726.09	0.22	N	2.6	3	E
20250726.12	0.24	N	2.2	6	E



Date time	Kuryk				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250721.12	0.25	NW	2.0	2	E
20250721.15	0.29	NW	2.2	2	SE
20250721.18	0.35	W	2.5	3	NW
20250721.21	0.41	W	2.7	2	NW
20250722.00	0.46	SW	2.8	4	SW
20250722.03	0.48	SW	3.0	5	S
20250722.06	0.49	SW	2.9	4	S
20250722.09	0.50	SW	2.9	3	SW
20250722.12	0.51	S	2.9	4	N
20250722.15	0.51	S	3.1	2	W
20250722.18	0.51	NW	3.5	1	SE
20250722.21	0.51	NW	3.8	1	SE
20250723.00	0.49	N	3.9	1	SE
20250723.03	0.46	N	3.9	0	N
20250723.06	0.43	NE	3.8	1	NW
20250723.09	0.41	NE	3.7	2	NW
20250723.12	0.39	NE	3.6	2	NW
20250723.15	0.39	E	3.3	3	NW
20250723.18	0.38	E	3.1	2	E
20250723.21	0.37	E	3.0	2	SW
20250724.00	0.35	E	3.1	1	NW
20250724.03	0.33	E	3.2	0	SW
20250724.06	0.33	SE	3.2	2	S
20250724.09	0.34	S	3.1	2	SE
20250724.12	0.34	S	3.1	2	E
20250724.15	0.33	S	3.0	3	S
20250724.18	0.34	SW	2.7	3	S
20250724.21	0.33	SW	2.5	4	S
20250725.00	0.31	W	2.4	3	SE
20250725.03	0.29	W	2.3	3	SE
20250725.06	0.28	W	2.3	3	SW
20250725.09	0.28	W	2.2	5	E
20250725.12	0.41	W	2.3	7	SE
20250725.15	0.44	NW	2.5	4	SE
20250725.18	0.39	NW	2.7	2	SW
20250725.21	0.34	NW	3.0	2	E
20250726.00	0.30	NW	3.1	3	NE
20250726.03	0.28	NW	3.0	3	W
20250726.06	0.26	NW	2.9	3	N
20250726.09	0.27	W	2.6	6	SW
20250726.12	0.38	NW	2.5	8	SE

**Calculation characteristics were obtained using the SWAN wave model, adapted in RSE «Kazhydromet» to the conditions of the Caspian Sea.*

Compiled by: Zhagparova N.N.

Checked by: Shishkina G.M.

RSE «Kazhydromet» – Caspian Sea Hydrometeorological Research Department

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