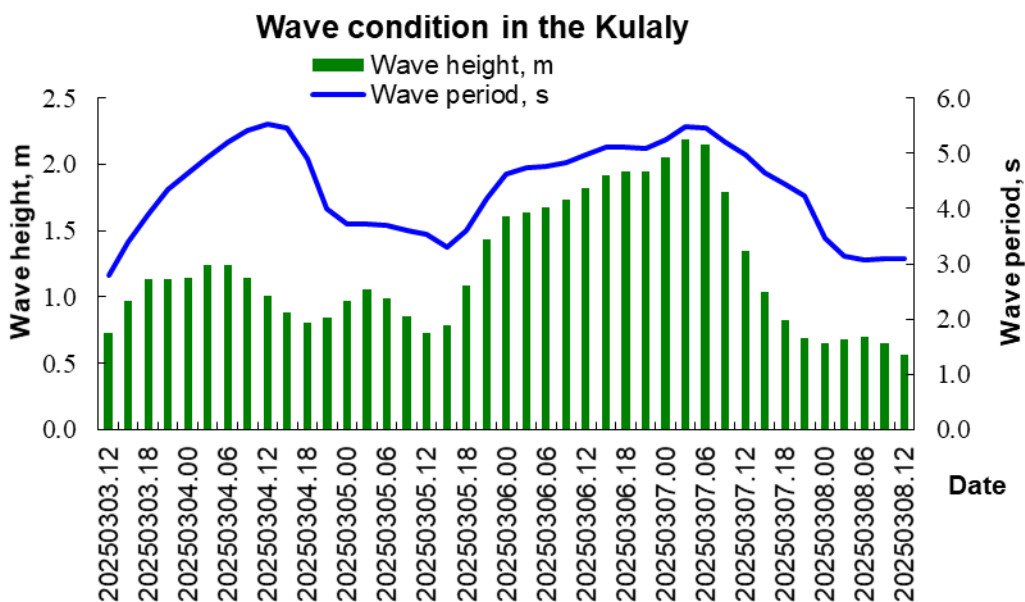
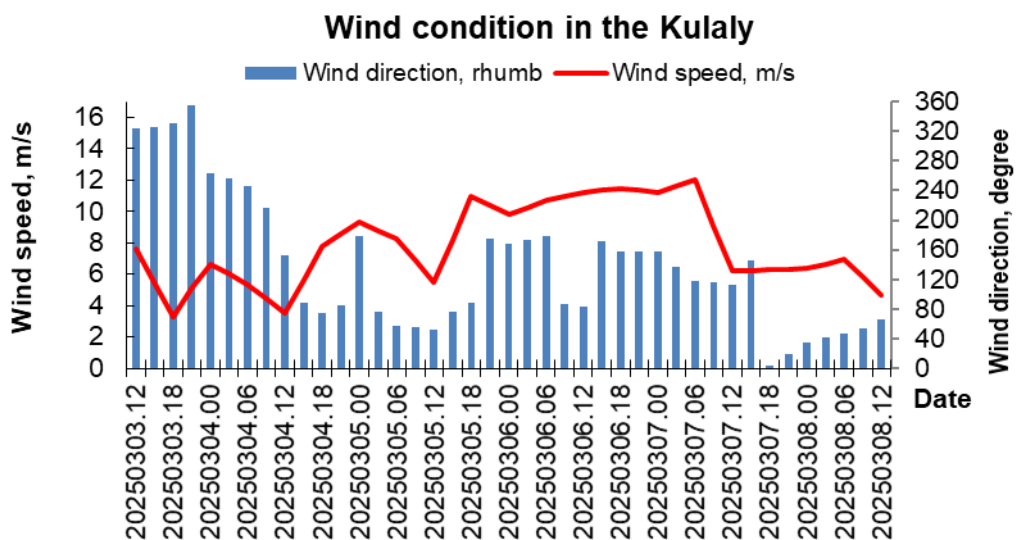




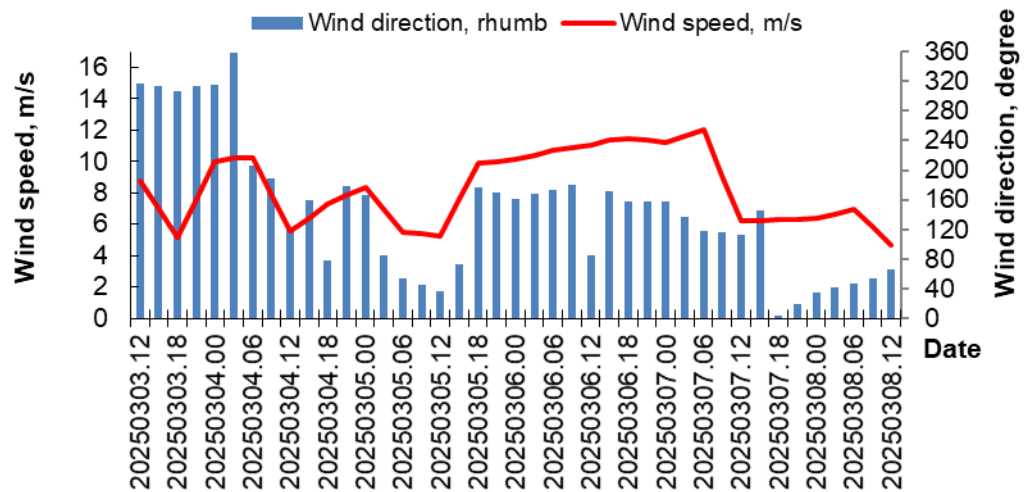
**MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN
RSE «KAZHYDROMET»**

**Wave and wind forecast for the Kazakhstan part of the Caspian Sea with a 5-day advance
using SWAN spectral model for the period March 03 – 08 , 2025.**

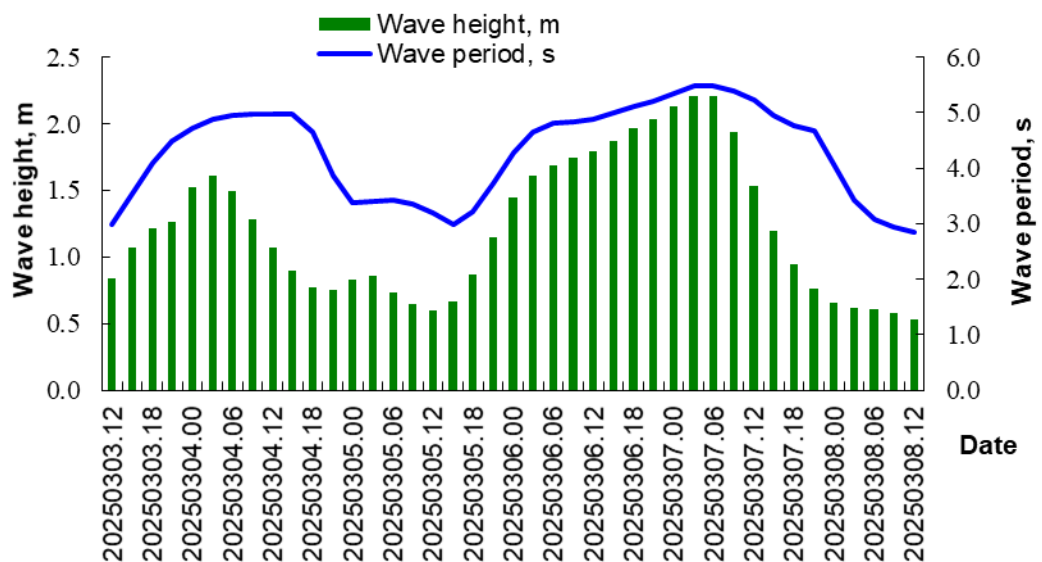


Date time	Kulaly				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.73	SE	2.8	8	NW
20250303.15	0.97	SE	3.4	5	NW
20250303.18	1.13	SE	3.9	3	NW
20250303.21	1.13	SE	4.3	5	N
20250304.00	1.15	SE	4.7	7	W
20250304.03	1.24	SE	4.9	6	W
20250304.06	1.24	SE	5.2	5	SW
20250304.09	1.15	SE	5.4	4	SW
20250304.12	1.01	E	5.5	4	SE
20250304.15	0.88	E	5.4	6	E
20250304.18	0.80	E	4.9	8	E
20250304.21	0.85	E	4.0	9	E
20250305.00	0.97	NE	3.7	9	S
20250305.03	1.06	NE	3.7	9	E
20250305.06	0.99	NE	3.7	8	NE
20250305.09	0.85	NE	3.6	7	NE
20250305.12	0.73	N	3.5	5	NE
20250305.15	0.79	N	3.3	8	E
20250305.18	1.09	N	3.6	11	E
20250305.21	1.43	N	4.2	10	S
20250306.00	1.60	N	4.6	10	S
20250306.03	1.63	N	4.7	10	S
20250306.06	1.68	N	4.8	11	S
20250306.09	1.73	N	4.8	11	E
20250306.12	1.82	N	5.0	11	E
20250306.15	1.91	N	5.1	11	S
20250306.18	1.95	N	5.1	11	SE
20250306.21	1.95	N	5.1	11	SE
20250307.00	2.05	N	5.3	11	S
20250307.03	2.18	N	5.5	12	SE
20250307.06	2.15	NW	5.5	12	SE
20250307.09	1.79	NW	5.2	9	SE
20250307.12	1.34	NW	5.0	6	SE
20250307.15	1.03	NW	4.7	6	SE
20250307.18	0.83	NW	4.4	6	N
20250307.21	0.69	NW	4.2	6	N
20250308.00	0.65	N	3.5	6	NE
20250308.03	0.68	N	3.1	7	NE
20250308.06	0.70	N	3.1	7	NE
20250308.09	0.65	N	3.1	6	NE
20250308.12	0.57	N	3.1	5	NE

Wind condition in the Fort-Shevchenko

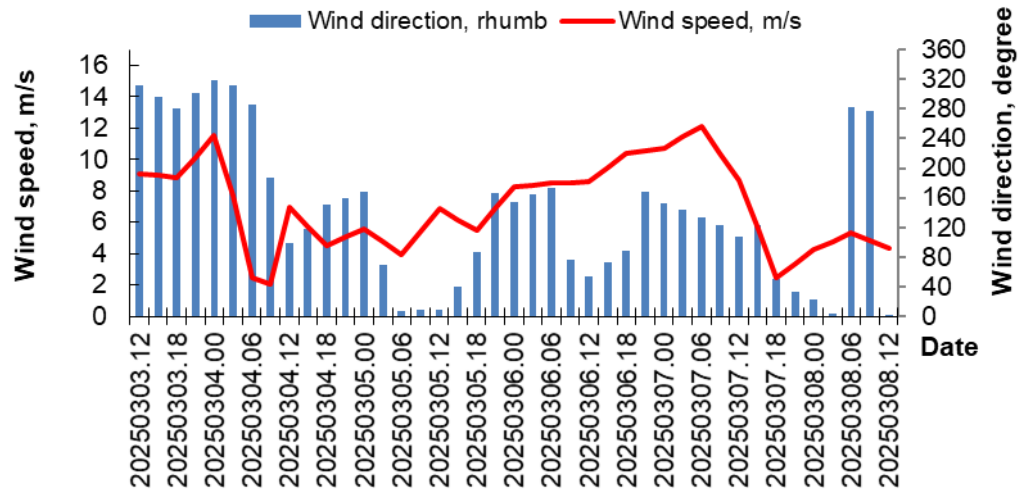


Wave condition in the Fort-Shevchenko

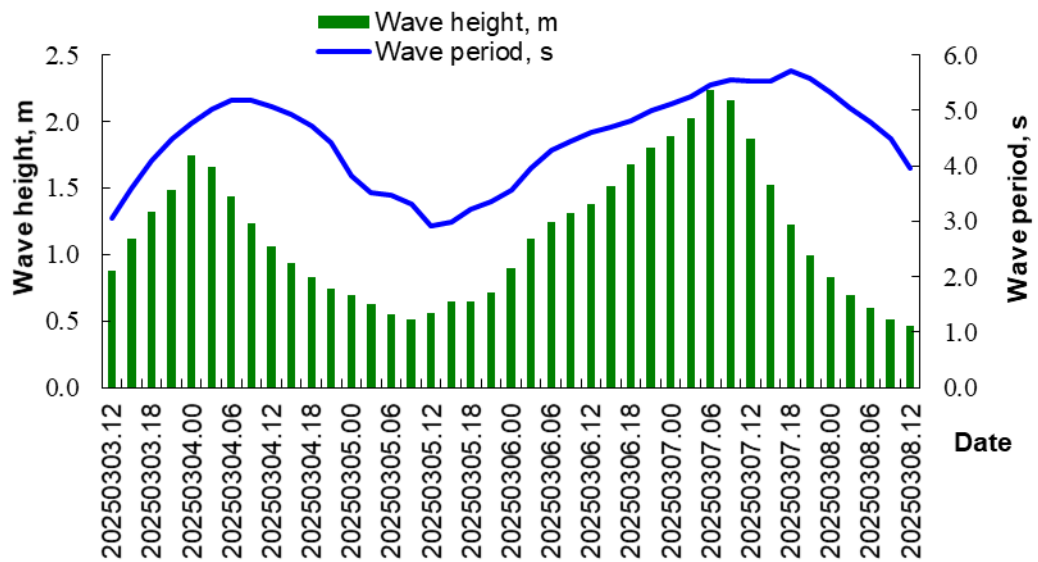


Date time	Fort-Shevchenko				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.84	SE	3.0	9	NW
20250303.15	1.07	SE	3.5	7	NW
20250303.18	1.22	SE	4.1	5	NW
20250303.21	1.27	SE	4.5	8	NW
20250304.00	1.52	SE	4.7	10	NW
20250304.03	1.62	SE	4.9	10	N
20250304.06	1.49	SE	5.0	10	SW
20250304.09	1.29	SE	5.0	8	S
20250304.12	1.07	SE	5.0	6	SE
20250304.15	0.90	E	5.0	6	S
20250304.18	0.77	E	4.6	7	E
20250304.21	0.75	E	3.9	8	S
20250305.00	0.83	NE	3.4	8	S
20250305.03	0.85	N	3.4	7	E
20250305.06	0.74	N	3.4	6	NE
20250305.09	0.64	NE	3.4	5	NE
20250305.12	0.60	NE	3.2	5	NE
20250305.15	0.67	NE	3.0	8	E
20250305.18	0.87	N	3.2	10	S
20250305.21	1.15	N	3.7	10	S
20250306.00	1.45	NW	4.3	10	S
20250306.03	1.62	NW	4.7	10	S
20250306.06	1.69	NW	4.8	11	S
20250306.09	1.74	N	4.8	11	S
20250306.12	1.79	N	4.9	11	E
20250306.15	1.87	N	5.0	11	S
20250306.18	1.97	N	5.1	11	SE
20250306.21	2.04	NW	5.2	11	SE
20250307.00	2.13	NW	5.4	11	S
20250307.03	2.21	NW	5.5	12	SE
20250307.06	2.20	NW	5.5	12	SE
20250307.09	1.94	NW	5.4	9	SE
20250307.12	1.53	NW	5.2	6	SE
20250307.15	1.19	NW	5.0	6	SE
20250307.18	0.95	NW	4.8	6	N
20250307.21	0.76	NW	4.7	6	N
20250308.00	0.66	NW	4.1	6	NE
20250308.03	0.62	N	3.4	7	NE
20250308.06	0.61	N	3.1	7	NE
20250308.09	0.58	N	2.9	6	NE
20250308.12	0.53	N	2.8	5	NE

Wind condition in the Aktau

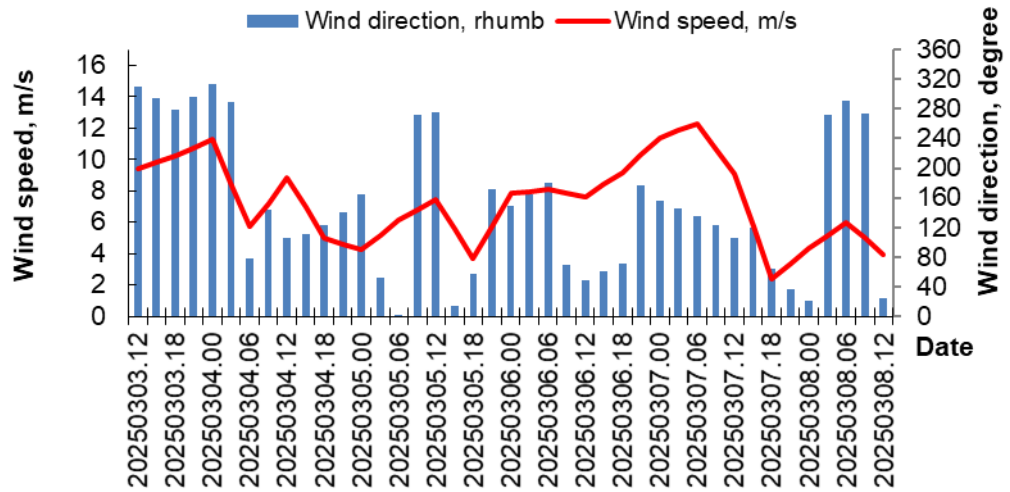


Wave condition in the Aktau

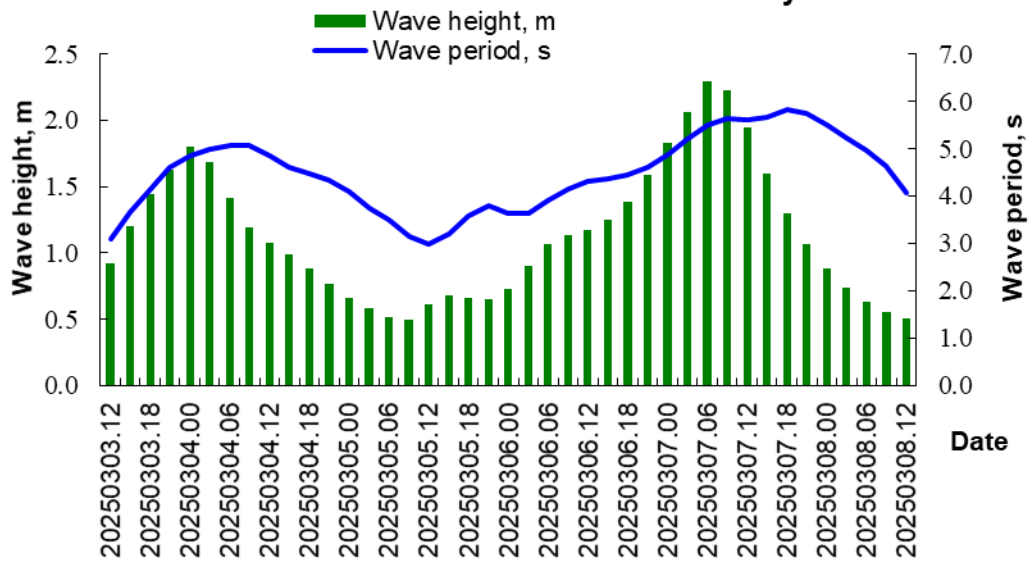


Date time	Aktau				
	Wave height, m	Направление волны, румб	Wave height, m	Скорость ветра, м/с	Wave height, m
20250303.12	0.88	SE	3.0	9	NW
20250303.15	1.12	SE	3.6	9	NW
20250303.18	1.32	SE	4.1	9	W
20250303.21	1.48	E	4.5	10	NW
20250304.00	1.74	E	4.8	11	NW
20250304.03	1.66	E	5.0	8	NW
20250304.06	1.44	E	5.2	2	W
20250304.09	1.23	E	5.2	2	S
20250304.12	1.06	E	5.1	7	E
20250304.15	0.93	E	4.9	6	SE
20250304.18	0.83	E	4.7	5	SE
20250304.21	0.74	E	4.4	5	S
20250305.00	0.69	NE	3.8	6	S
20250305.03	0.63	NE	3.5	5	E
20250305.06	0.55	NE	3.5	4	N
20250305.09	0.51	NE	3.3	5	N
20250305.12	0.56	NE	2.9	7	N
20250305.15	0.64	NE	3.0	6	NE
20250305.18	0.65	NE	3.2	5	E
20250305.21	0.71	NE	3.4	7	S
20250306.00	0.90	N	3.6	8	SE
20250306.03	1.12	NW	4.0	8	S
20250306.06	1.24	NW	4.3	8	S
20250306.09	1.31	NW	4.4	9	E
20250306.12	1.38	NW	4.6	9	NE
20250306.15	1.52	N	4.7	10	E
20250306.18	1.68	N	4.8	10	E
20250306.21	1.81	NW	5.0	11	S
20250307.00	1.89	NW	5.1	11	SE
20250307.03	2.03	NW	5.3	11	SE
20250307.06	2.24	NW	5.5	12	SE
20250307.09	2.16	NW	5.6	10	SE
20250307.12	1.87	NW	5.5	9	E
20250307.15	1.53	NW	5.5	6	SE
20250307.18	1.22	NW	5.7	2	NE
20250307.21	1.00	NW	5.6	3	NE
20250308.00	0.83	NW	5.3	4	N
20250308.03	0.70	NW	5.1	5	N
20250308.06	0.59	NW	4.8	5	W
20250308.09	0.52	NW	4.5	5	W
20250308.12	0.46	NW	3.9	4	N

Wind condition in the Peschanyi

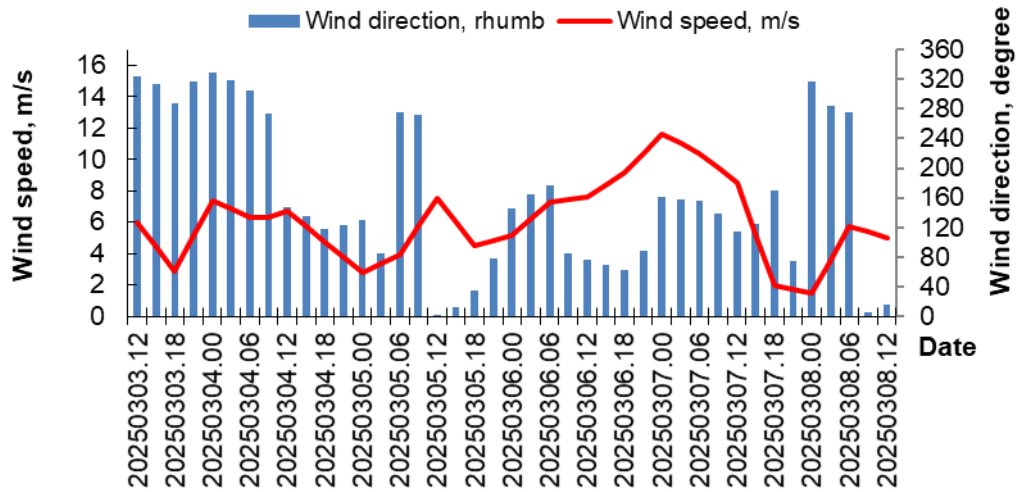


Wave condition in the Peschanyi

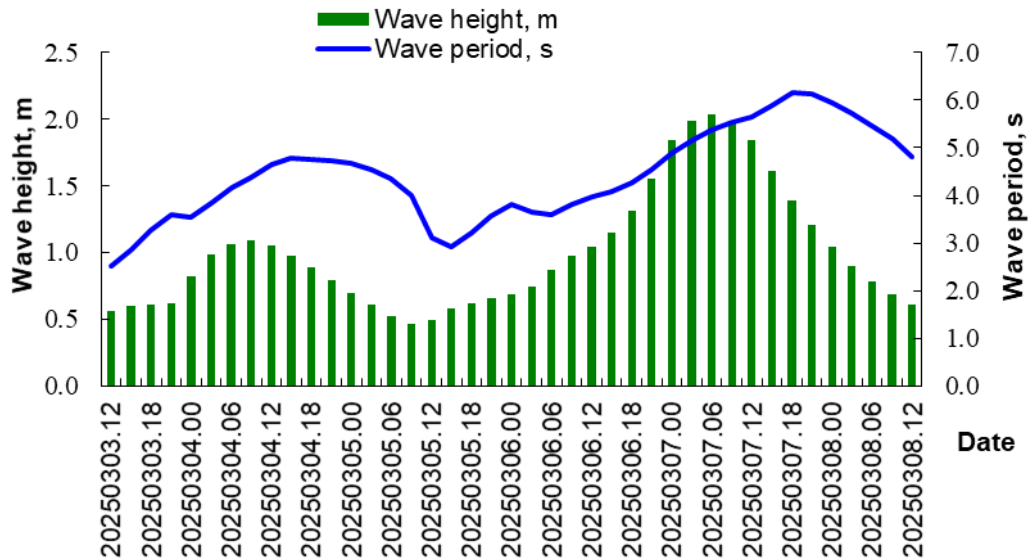


Date time	Peschanyi (Isan)				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.92	SE	3.1	9	NW
20250303.15	1.20	SE	3.7	10	NW
20250303.18	1.45	E	4.2	10	W
20250303.21	1.63	E	4.6	11	NW
20250304.00	1.80	E	4.8	11	NW
20250304.03	1.68	E	5.0	9	W
20250304.06	1.41	E	5.1	6	E
20250304.09	1.19	E	5.1	7	SE
20250304.12	1.08	E	4.8	9	E
20250304.15	0.99	NE	4.6	7	E
20250304.18	0.88	NE	4.5	5	SE
20250304.21	0.77	NE	4.3	5	SE
20250305.00	0.67	NE	4.1	4	S
20250305.03	0.59	NE	3.7	5	NE
20250305.06	0.52	NE	3.5	6	N
20250305.09	0.50	NE	3.2	7	W
20250305.12	0.61	E	3.0	7	W
20250305.15	0.68	E	3.2	6	N
20250305.18	0.66	E	3.6	4	NE
20250305.21	0.66	E	3.8	6	S
20250306.00	0.73	NE	3.6	8	SE
20250306.03	0.91	N	3.6	8	S
20250306.06	1.07	NW	3.9	8	S
20250306.09	1.13	NW	4.2	8	E
20250306.12	1.17	NW	4.3	8	NE
20250306.15	1.25	N	4.4	8	NE
20250306.18	1.39	N	4.4	9	E
20250306.21	1.58	N	4.6	10	S
20250307.00	1.83	NW	4.9	11	SE
20250307.03	2.06	NW	5.2	12	SE
20250307.06	2.29	NW	5.5	12	SE
20250307.09	2.23	NW	5.6	11	SE
20250307.12	1.95	NW	5.6	9	E
20250307.15	1.60	NW	5.7	6	SE
20250307.18	1.30	NW	5.8	2	NE
20250307.21	1.06	NW	5.7	3	NE
20250308.00	0.88	NW	5.5	4	N
20250308.03	0.74	NW	5.2	5	W
20250308.06	0.63	NW	5.0	6	W
20250308.09	0.55	NW	4.6	5	W
20250308.12	0.50	NW	4.1	4	NE

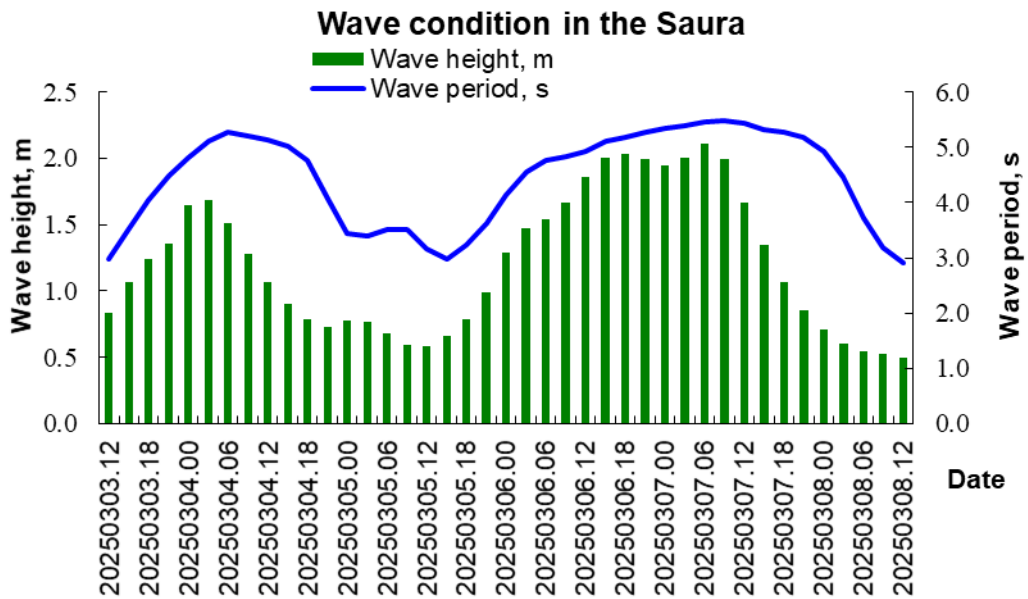
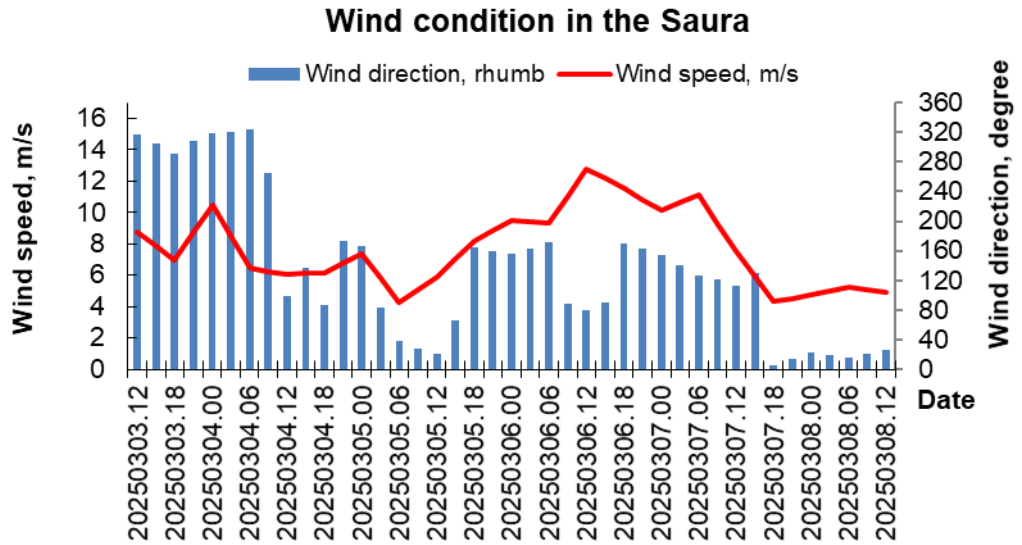
Wind condition in the Fetisovo



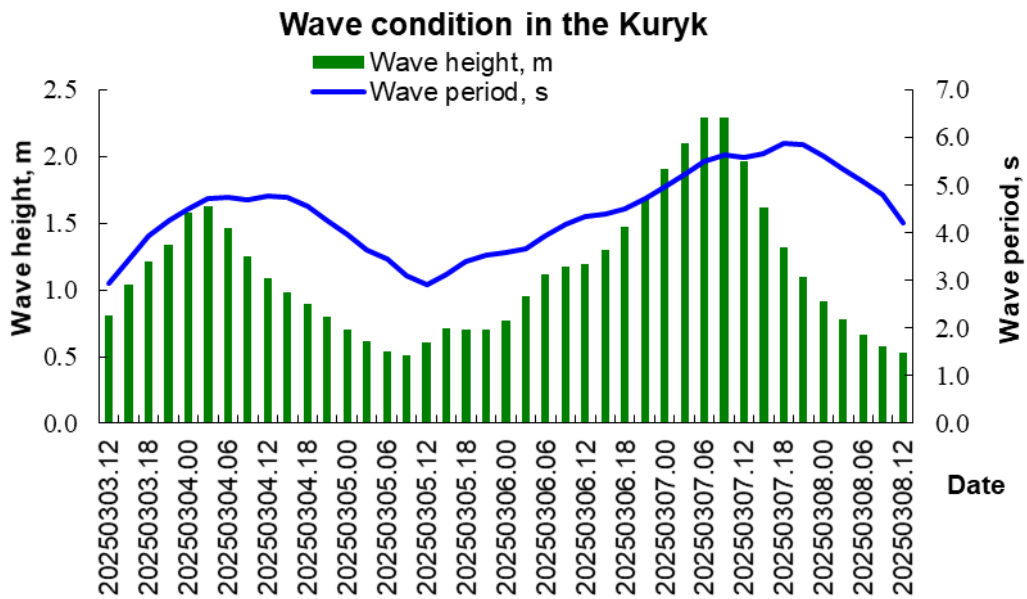
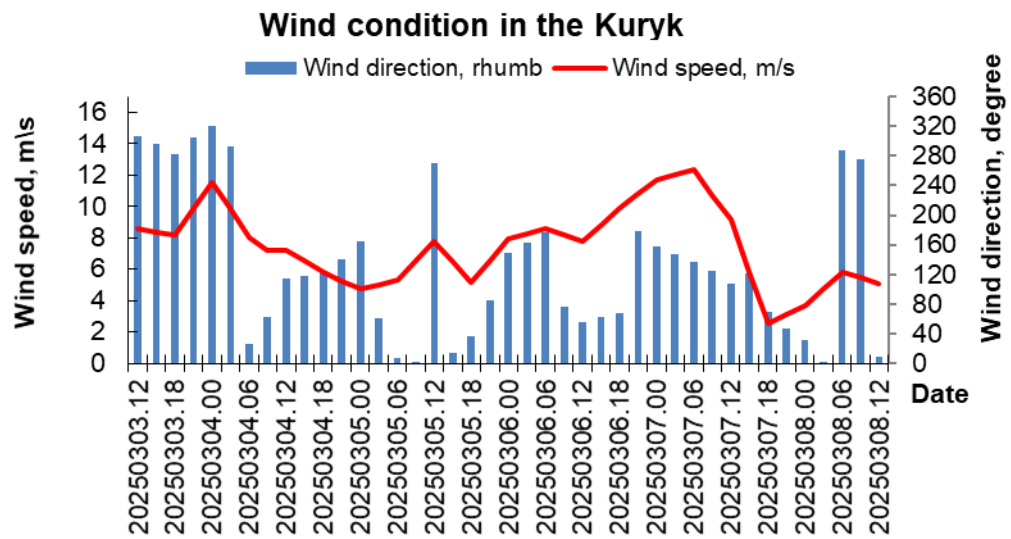
Wave condition in the Fetisovo



Date time	Fetisovo				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.56	SE	2.5	6	NW
20250303.15	0.60	SE	2.9	4	NW
20250303.18	0.61	SE	3.3	3	W
20250303.21	0.62	E	3.6	5	NW
20250304.00	0.82	E	3.5	7	NW
20250304.03	0.98	E	3.8	7	NW
20250304.06	1.06	E	4.2	6	NW
20250304.09	1.09	E	4.4	6	W
20250304.12	1.05	E	4.6	7	SE
20250304.15	0.98	E	4.8	6	SE
20250304.18	0.89	NE	4.8	5	SE
20250304.21	0.80	NE	4.7	4	SE
20250305.00	0.70	NE	4.7	3	SE
20250305.03	0.61	N	4.5	3	E
20250305.06	0.53	N	4.4	4	W
20250305.09	0.47	N	4.0	6	W
20250305.12	0.50	NE	3.1	8	N
20250305.15	0.58	NE	2.9	6	N
20250305.18	0.62	NE	3.2	4	NE
20250305.21	0.66	NE	3.6	5	E
20250306.00	0.68	NE	3.8	5	SE
20250306.03	0.75	NE	3.7	6	S
20250306.06	0.87	N	3.6	7	S
20250306.09	0.97	N	3.8	7	E
20250306.12	1.04	N	4.0	8	E
20250306.15	1.15	N	4.1	8	E
20250306.18	1.31	N	4.3	9	NE
20250306.21	1.56	N	4.5	10	E
20250307.00	1.85	N	4.9	12	S
20250307.03	1.99	NW	5.2	11	S
20250307.06	2.04	NW	5.4	10	SE
20250307.09	1.99	NW	5.5	9	SE
20250307.12	1.84	NW	5.7	8	SE
20250307.15	1.61	NW	5.9	5	SE
20250307.18	1.39	NW	6.2	2	S
20250307.21	1.20	NW	6.1	2	E
20250308.00	1.04	NW	5.9	1	NW
20250308.03	0.90	NW	5.7	4	W
20250308.06	0.78	NW	5.5	6	W
20250308.09	0.68	NW	5.2	5	N
20250308.12	0.61	NW	4.8	5	N



Date time	Saura				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.83	SE	3.0	9	NW
20250303.15	1.07	SE	3.5	8	NW
20250303.18	1.24	SE	4.1	7	W
20250303.21	1.35	E	4.5	9	NW
20250304.00	1.65	E	4.8	10	NW
20250304.03	1.69	E	5.1	8	NW
20250304.06	1.51	E	5.3	6	NW
20250304.09	1.28	E	5.2	6	W
20250304.12	1.07	E	5.1	6	E
20250304.15	0.90	E	5.0	6	SE
20250304.18	0.78	E	4.8	6	E
20250304.21	0.73	E	4.1	7	S
20250305.00	0.77	NE	3.5	7	S
20250305.03	0.77	N	3.4	6	E
20250305.06	0.68	N	3.5	4	NE
20250305.09	0.60	N	3.5	5	NE
20250305.12	0.59	NE	3.2	6	N
20250305.15	0.66	NE	3.0	7	NE
20250305.18	0.79	N	3.2	8	S
20250305.21	0.99	N	3.6	9	S
20250306.00	1.29	NW	4.1	9	SE
20250306.03	1.48	NW	4.5	9	S
20250306.06	1.54	NW	4.8	9	S
20250306.09	1.67	NW	4.8	11	E
20250306.12	1.85	N	4.9	13	E
20250306.15	2.00	N	5.1	12	E
20250306.18	2.03	N	5.2	12	S
20250306.21	2.00	NW	5.3	11	S
20250307.00	1.94	NW	5.3	10	SE
20250307.03	2.00	NW	5.4	11	SE
20250307.06	2.11	NW	5.5	11	SE
20250307.09	1.99	NW	5.5	9	SE
20250307.12	1.67	NW	5.4	7	SE
20250307.15	1.35	NW	5.3	6	SE
20250307.18	1.07	NW	5.3	4	N
20250307.21	0.86	NW	5.2	5	N
20250308.00	0.71	NW	4.9	5	NE
20250308.03	0.61	NW	4.5	5	N
20250308.06	0.55	NW	3.7	5	N
20250308.09	0.52	N	3.2	5	N
20250308.12	0.50	N	2.9	5	NE



Date time	Kuryk				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250303.12	0.81	SE	2.9	9	NW
20250303.15	1.04	SE	3.5	8	NW
20250303.18	1.22	SE	3.9	8	W
20250303.21	1.34	E	4.3	10	NW
20250304.00	1.58	E	4.5	11	NW
20250304.03	1.63	E	4.7	10	W
20250304.06	1.47	E	4.7	8	NE
20250304.09	1.26	E	4.7	7	NE
20250304.12	1.09	E	4.8	7	SE
20250304.15	0.98	NE	4.7	7	SE
20250304.18	0.89	NE	4.5	6	SE
20250304.21	0.80	NE	4.3	5	SE
20250305.00	0.70	NE	4.0	5	S
20250305.03	0.62	NE	3.6	5	NE
20250305.06	0.54	N	3.4	5	N
20250305.09	0.51	NE	3.1	7	N
20250305.12	0.60	NE	2.9	8	W
20250305.15	0.71	E	3.1	6	N
20250305.18	0.70	E	3.4	5	NE
20250305.21	0.71	NE	3.5	7	E
20250306.00	0.77	NE	3.6	8	SE
20250306.03	0.95	N	3.7	8	S
20250306.06	1.12	N	3.9	9	S
20250306.09	1.18	NW	4.2	8	E
20250306.12	1.20	N	4.3	8	NE
20250306.15	1.30	N	4.4	9	NE
20250306.18	1.47	N	4.5	10	E
20250306.21	1.69	N	4.7	11	S
20250307.00	1.91	NW	5.0	12	S
20250307.03	2.10	NW	5.2	12	SE
20250307.06	2.30	NW	5.5	12	SE
20250307.09	2.30	NW	5.6	11	SE
20250307.12	1.96	NW	5.6	9	E
20250307.15	1.62	NW	5.7	6	SE
20250307.18	1.32	NW	5.9	3	E
20250307.21	1.10	NW	5.8	3	NE
20250308.00	0.92	NW	5.6	4	NE
20250308.03	0.78	NW	5.3	5	N
20250308.06	0.67	NW	5.1	6	W
20250308.09	0.58	NW	4.8	5	W
20250308.12	0.53	NW	4.2	5	N

**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

Phone. (717)2 79 83 12; E-mail: ugmikm@meteo.kz