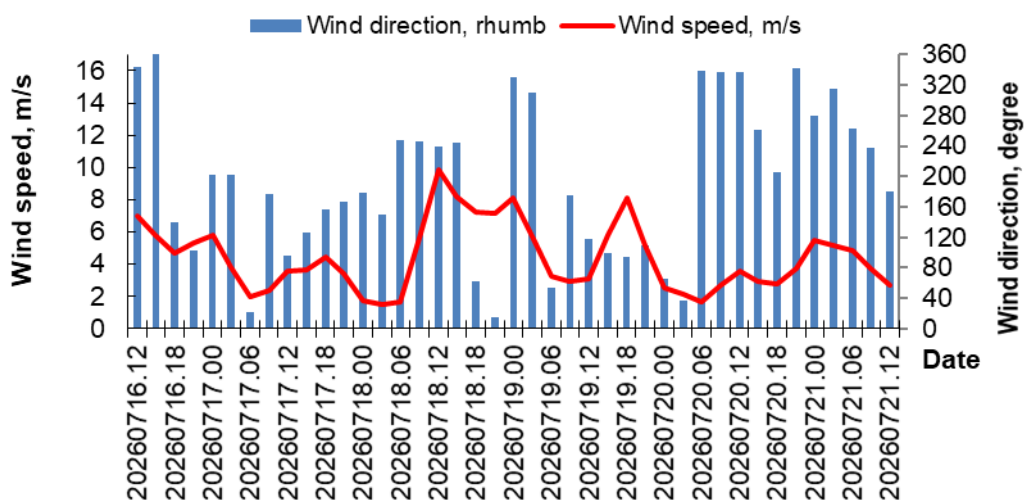




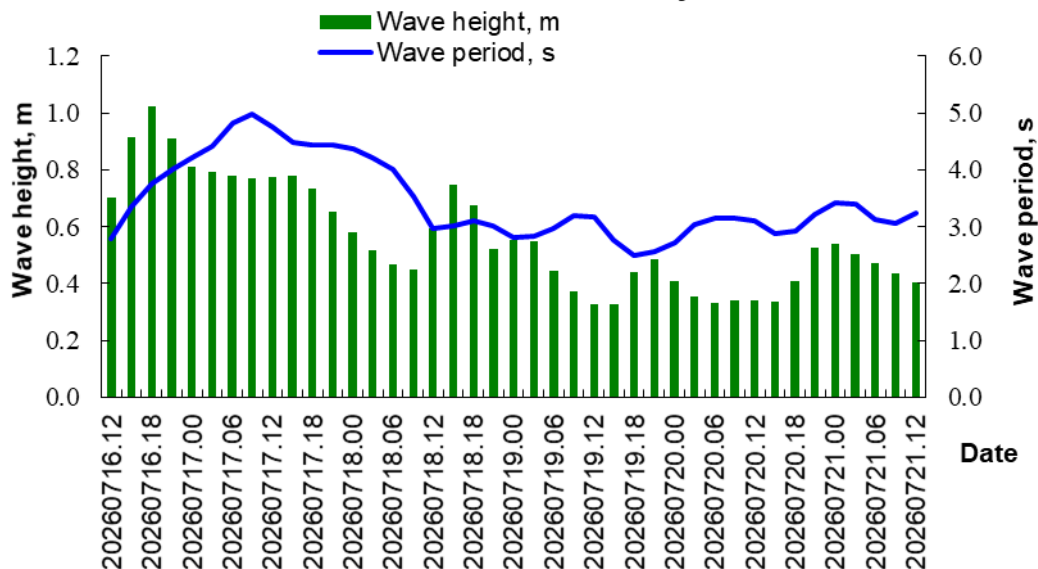
**MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN
RSE «KAZHYDROMET»**

**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 16 – 21, 2026 .**

Wind condition in the Kulaly

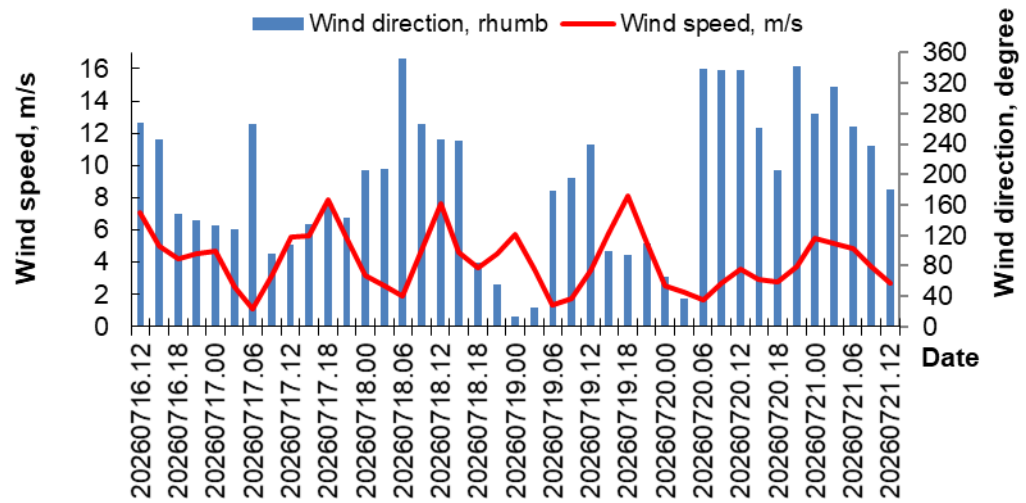


Wave condition in the Kulaly

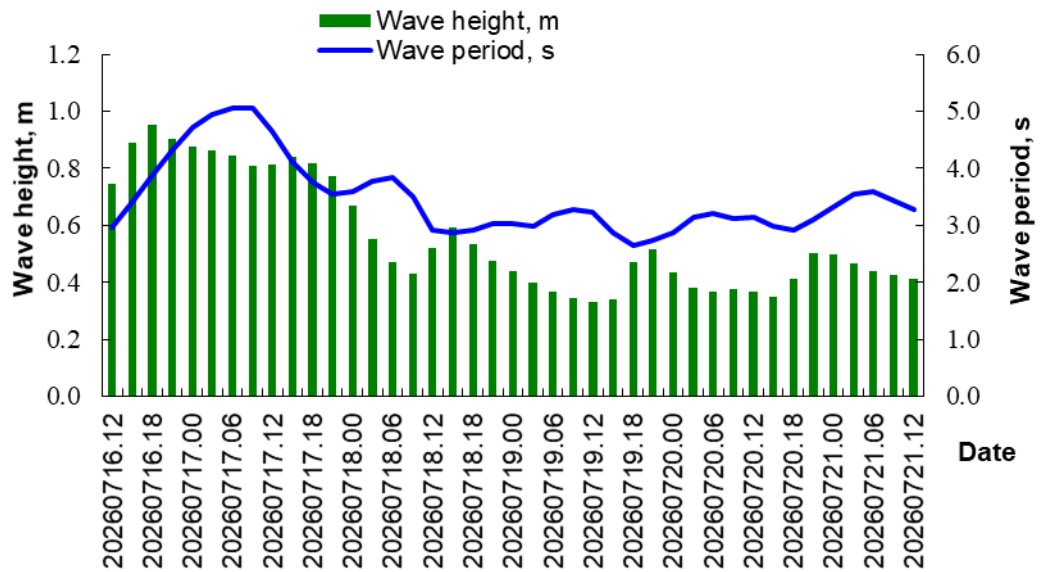


Date time	Kulaly				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.70	S	2.8	7	N
20260716.15	0.91	S	3.3	6	N
20260716.18	1.02	S	3.8	5	SE
20260716.21	0.91	SE	4.0	5	E
20260717.00	0.81	SE	4.2	6	S
20260717.03	0.79	SE	4.4	4	S
20260717.06	0.78	SE	4.8	2	NE
20260717.09	0.77	SE	5.0	2	S
20260717.12	0.77	SE	4.8	4	E
20260717.15	0.78	SE	4.5	4	SE
20260717.18	0.73	SE	4.4	4	SE
20260717.21	0.65	SE	4.4	3	S
20260718.00	0.58	SE	4.4	2	S
20260718.03	0.52	S	4.2	2	SE
20260718.06	0.47	S	4.0	2	W
20260718.09	0.45	S	3.5	6	SW
20260718.12	0.59	S	3.0	10	SW
20260718.15	0.75	S	3.0	8	SW
20260718.18	0.67	S	3.1	7	NE
20260718.21	0.52	SW	3.0	7	N
20260719.00	0.55	S	2.8	8	NW
20260719.03	0.55	S	2.8	6	NW
20260719.06	0.45	SW	3.0	3	NE
20260719.09	0.37	W	3.2	3	S
20260719.12	0.33	W	3.2	3	SE
20260719.15	0.33	W	2.8	6	E
20260719.18	0.44	W	2.5	8	E
20260719.21	0.48	W	2.6	5	E
20260720.00	0.41	W	2.7	3	NE
20260720.03	0.35	W	3.0	2	NE
20260720.06	0.33	W	3.2	2	N
20260720.09	0.34	SW	3.1	3	N
20260720.12	0.34	SW	3.1	4	NW
20260720.15	0.34	SW	2.9	3	W
20260720.18	0.41	SW	2.9	3	SW
20260720.21	0.53	SW	3.2	4	N
20260721.00	0.54	SW	3.4	5	W
20260721.03	0.50	SW	3.4	5	NW
20260721.06	0.47	SW	3.1	5	W
20260721.09	0.44	SW	3.1	4	SW
20260721.12	0.40	SW	3.2	3	S

Wind condition in the Fort-Shevchenko

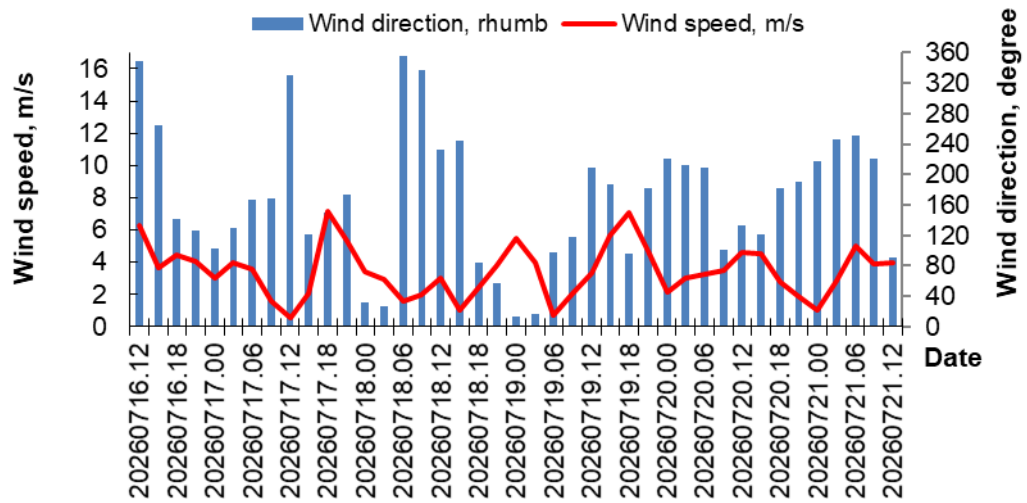


Wave condition in the Fort-Shevchenko

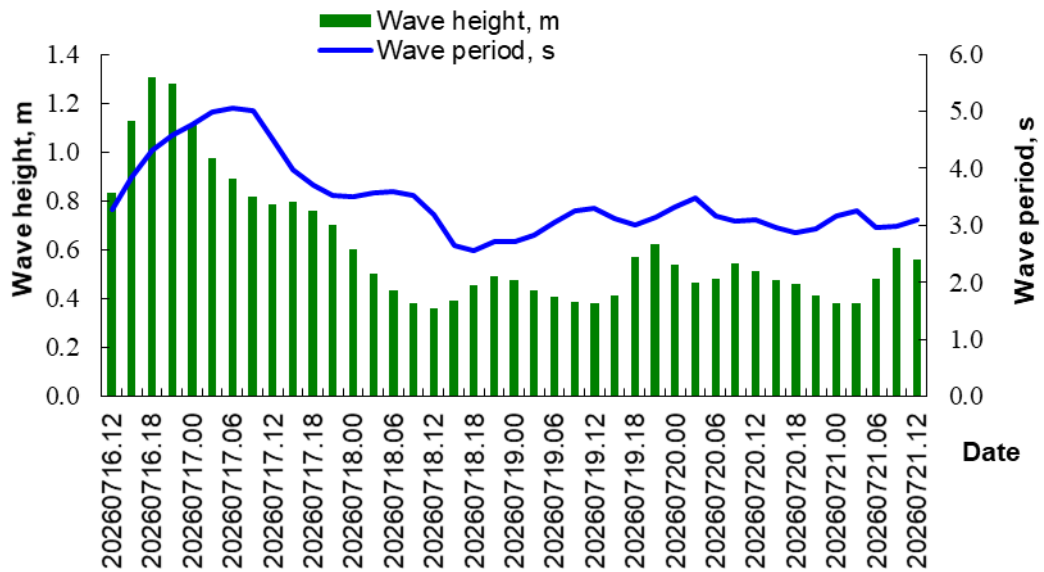


Date time	Fort-Shevchenko				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.74	S	3.0	7	W
20260716.15	0.89	S	3.4	5	SW
20260716.18	0.95	S	3.9	4	SE
20260716.21	0.90	SE	4.3	5	SE
20260717.00	0.88	SE	4.7	5	SE
20260717.03	0.86	SE	4.9	2	SE
20260717.06	0.84	SE	5.1	1	W
20260717.09	0.81	SE	5.1	3	E
20260717.12	0.81	SE	4.6	6	E
20260717.15	0.84	S	4.1	6	SE
20260717.18	0.82	S	3.7	8	S
20260717.21	0.77	S	3.5	6	SE
20260718.00	0.67	S	3.6	3	SW
20260718.03	0.55	S	3.8	3	SW
20260718.06	0.47	S	3.9	2	N
20260718.09	0.43	S	3.5	5	W
20260718.12	0.52	S	2.9	8	SW
20260718.15	0.59	S	2.9	5	SW
20260718.18	0.54	SW	2.9	4	E
20260718.21	0.47	SW	3.0	5	NE
20260719.00	0.44	W	3.0	6	N
20260719.03	0.40	W	3.0	4	NE
20260719.06	0.37	W	3.2	1	S
20260719.09	0.34	W	3.3	2	S
20260719.12	0.33	W	3.2	4	SW
20260719.15	0.34	W	2.9	6	E
20260719.18	0.47	W	2.6	8	E
20260719.21	0.51	W	2.7	5	E
20260720.00	0.43	W	2.9	3	NE
20260720.03	0.38	W	3.1	2	NE
20260720.06	0.37	W	3.2	2	N
20260720.09	0.38	SW	3.1	3	N
20260720.12	0.37	SW	3.1	4	NW
20260720.15	0.35	SW	3.0	3	W
20260720.18	0.41	W	2.9	3	SW
20260720.21	0.50	W	3.1	4	N
20260721.00	0.50	W	3.3	5	W
20260721.03	0.47	W	3.6	5	NW
20260721.06	0.44	SW	3.6	5	W
20260721.09	0.42	SW	3.4	4	SW
20260721.12	0.41	SW	3.3	3	S

Wind condition in the Aktau

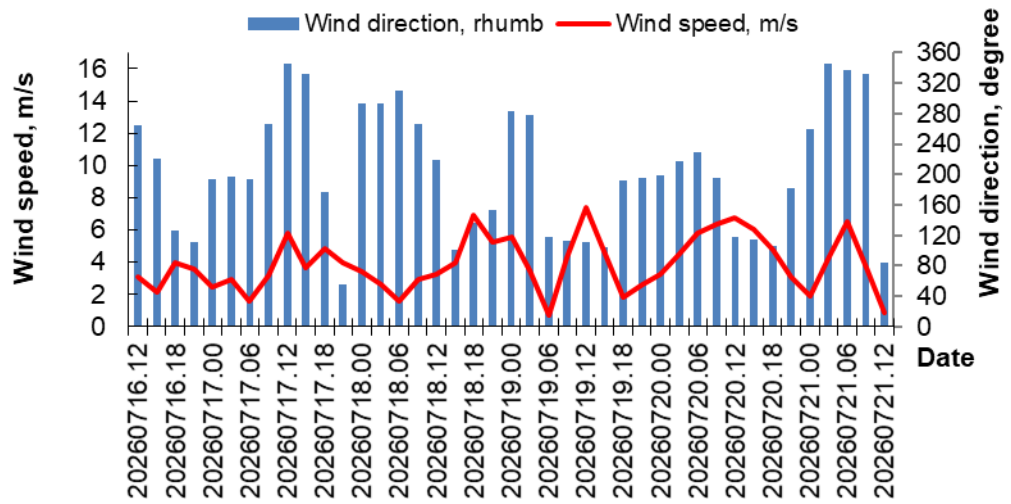


Wave condition in the Aktau

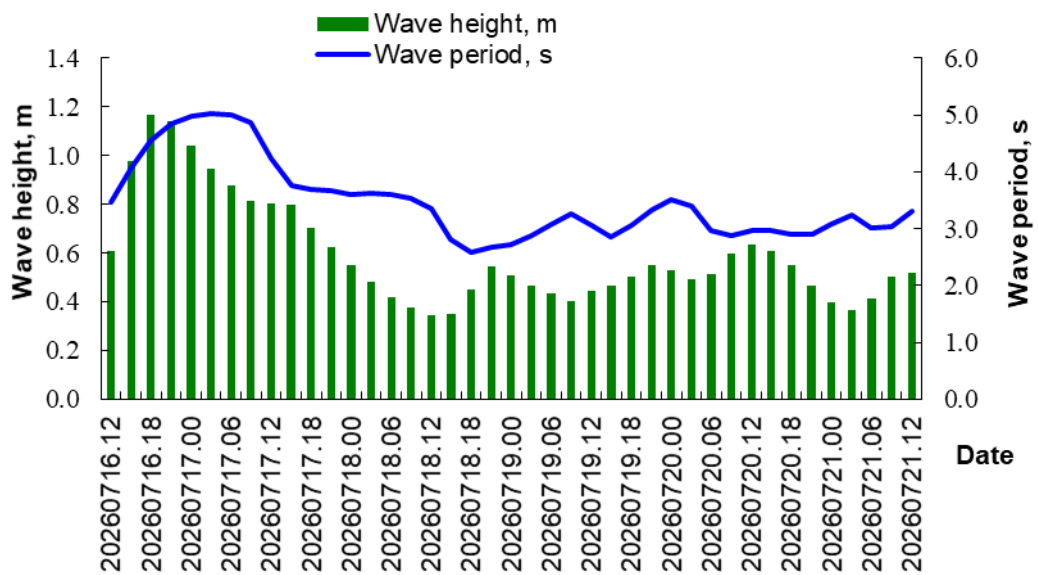


Date time	Aktau				
	Wave height, m	Направление волны, румб	Wave height, m	Скорость ветра, м/с	Wave height, m
20260716.12	0.83	S	3.3	6	N
20260716.15	1.13	S	3.8	4	W
20260716.18	1.31	SE	4.3	4	SE
20260716.21	1.28	SE	4.6	4	SE
20260717.00	1.11	SE	4.8	3	E
20260717.03	0.97	SE	5.0	4	SE
20260717.06	0.89	S	5.1	4	S
20260717.09	0.82	S	5.0	2	S
20260717.12	0.78	S	4.5	1	NW
20260717.15	0.80	S	4.0	2	SE
20260717.18	0.76	S	3.7	7	SE
20260717.21	0.70	SW	3.5	5	S
20260718.00	0.60	SW	3.5	3	NE
20260718.03	0.50	SW	3.6	3	NE
20260718.06	0.43	SW	3.6	2	N
20260718.09	0.38	SW	3.5	2	NW
20260718.12	0.36	SW	3.2	3	SW
20260718.15	0.39	SW	2.7	1	SW
20260718.18	0.45	W	2.6	2	E
20260718.21	0.49	NW	2.7	4	NE
20260719.00	0.47	NW	2.7	5	N
20260719.03	0.43	NW	2.8	4	N
20260719.06	0.40	NW	3.1	1	E
20260719.09	0.39	W	3.3	2	SE
20260719.12	0.38	SW	3.3	3	SW
20260719.15	0.41	W	3.1	6	S
20260719.18	0.57	W	3.0	7	E
20260719.21	0.62	W	3.2	5	S
20260720.00	0.54	W	3.3	2	SW
20260720.03	0.47	W	3.5	3	SW
20260720.06	0.48	W	3.2	3	SW
20260720.09	0.54	W	3.1	3	E
20260720.12	0.51	W	3.1	5	SE
20260720.15	0.47	W	3.0	5	SE
20260720.18	0.46	W	2.9	3	S
20260720.21	0.41	W	2.9	2	S
20260721.00	0.38	W	3.2	1	SW
20260721.03	0.38	W	3.2	3	SW
20260721.06	0.48	SW	3.0	5	W
20260721.09	0.60	SW	3.0	4	SW
20260721.12	0.56	SW	3.1	4	E

Wind condition in the Peschanyi

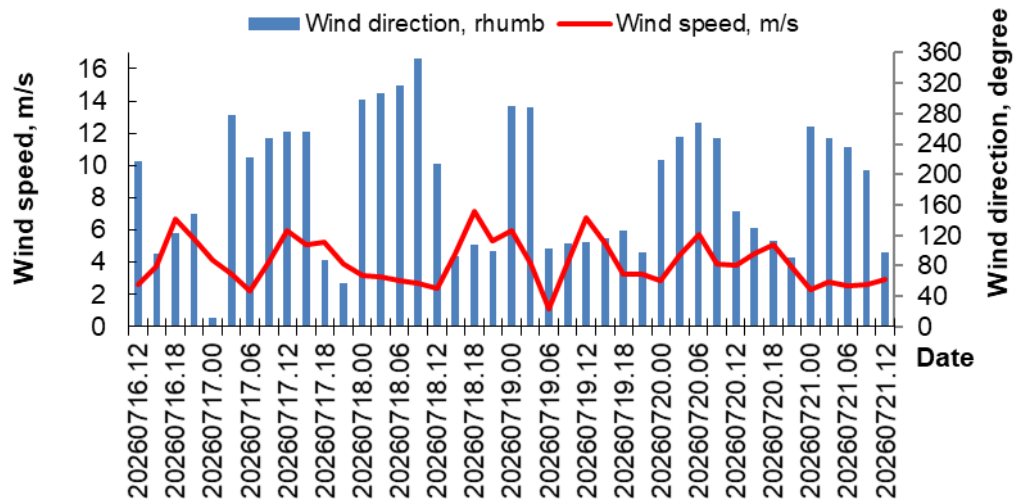


Wave condition in the Peschanyi

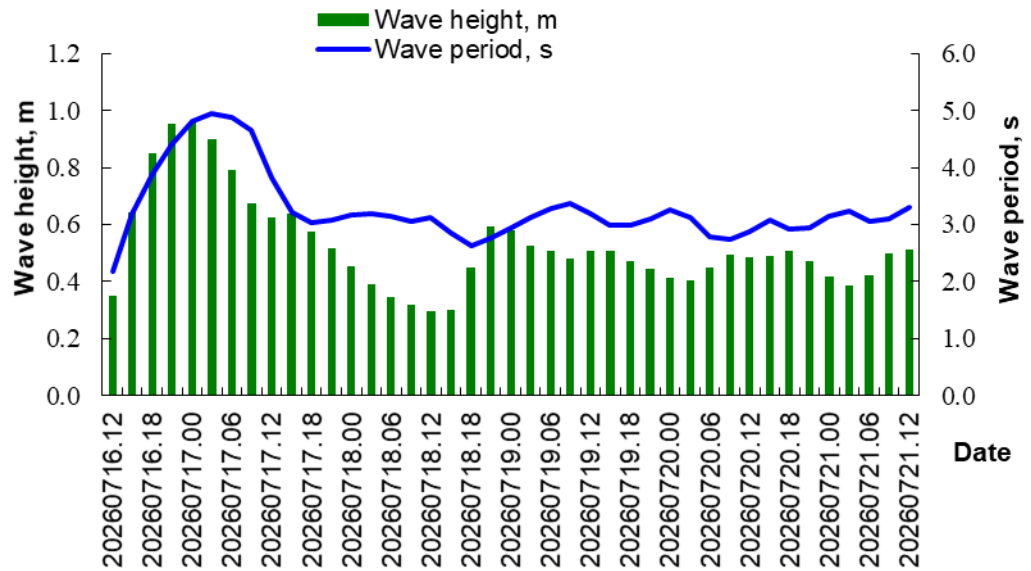


Date time	Peschanyi (Isan)				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.61	S	3.5	3	W
20260716.15	0.98	SE	4.1	2	SW
20260716.18	1.17	SE	4.6	4	SE
20260716.21	1.14	SE	4.8	4	E
20260717.00	1.04	SE	5.0	2	S
20260717.03	0.95	S	5.0	3	S
20260717.06	0.88	S	5.0	2	S
20260717.09	0.81	S	4.9	3	W
20260717.12	0.80	S	4.2	6	N
20260717.15	0.80	S	3.8	4	NW
20260717.18	0.70	S	3.7	5	S
20260717.21	0.62	S	3.7	4	NE
20260718.00	0.55	SW	3.6	3	W
20260718.03	0.48	SW	3.6	3	NW
20260718.06	0.42	SW	3.6	2	NW
20260718.09	0.37	SW	3.5	3	W
20260718.12	0.34	SW	3.3	3	SW
20260718.15	0.35	SW	2.8	4	E
20260718.18	0.45	W	2.6	7	SE
20260718.21	0.54	NW	2.7	5	SE
20260719.00	0.51	NW	2.7	6	W
20260719.03	0.47	N	2.9	3	W
20260719.06	0.43	NE	3.1	1	SE
20260719.09	0.40	NE	3.3	4	E
20260719.12	0.44	W	3.0	7	E
20260719.15	0.47	W	2.9	5	E
20260719.18	0.50	W	3.1	2	S
20260719.21	0.55	W	3.3	3	S
20260720.00	0.53	W	3.5	3	S
20260720.03	0.49	W	3.4	5	SW
20260720.06	0.52	W	3.0	6	SW
20260720.09	0.60	W	2.9	6	S
20260720.12	0.64	W	3.0	7	SE
20260720.15	0.61	W	3.0	6	SE
20260720.18	0.55	W	2.9	5	E
20260720.21	0.46	W	2.9	3	S
20260721.00	0.40	W	3.1	2	W
20260721.03	0.37	W	3.2	4	N
20260721.06	0.41	SW	3.0	7	N
20260721.09	0.50	SW	3.0	4	NW
20260721.12	0.52	SW	3.3	1	E

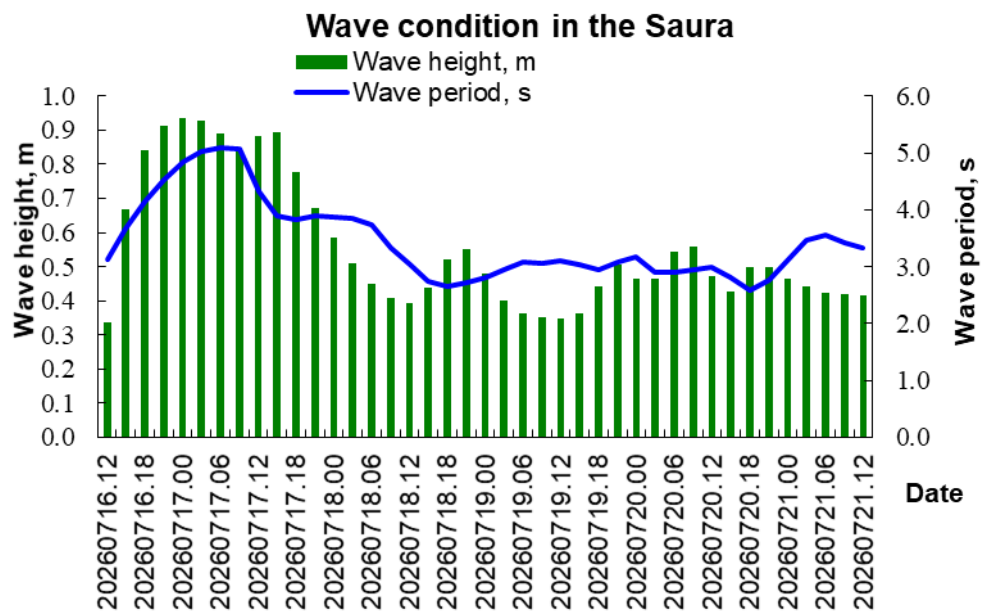
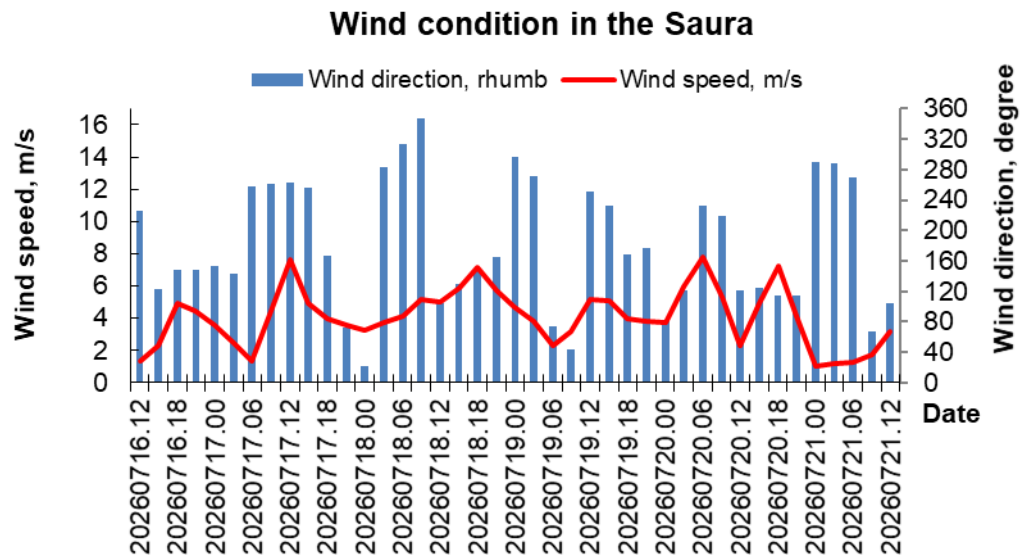
Wind condition in the Fetisovo



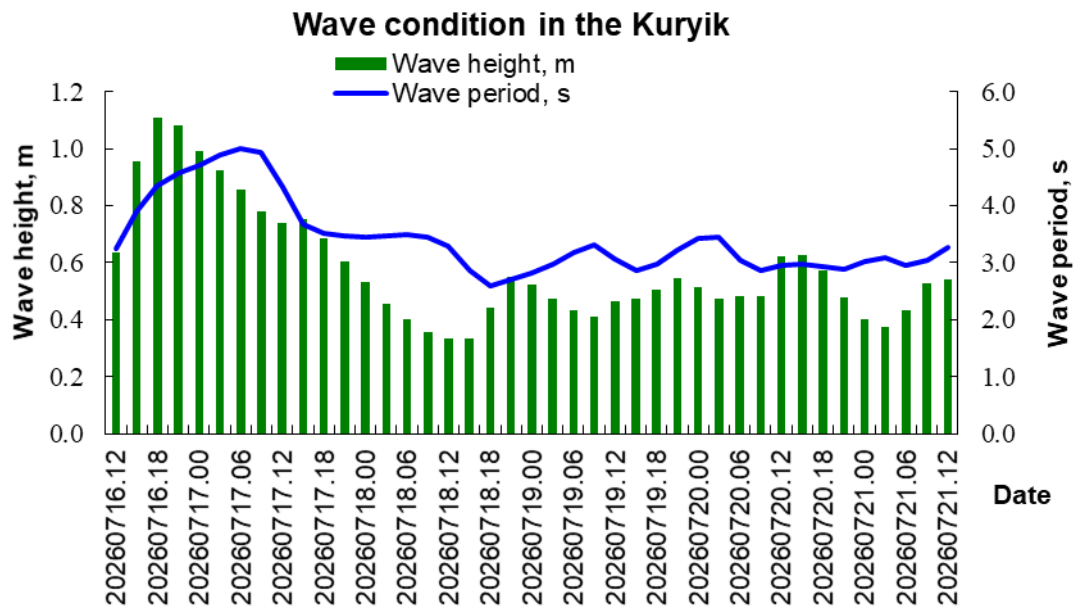
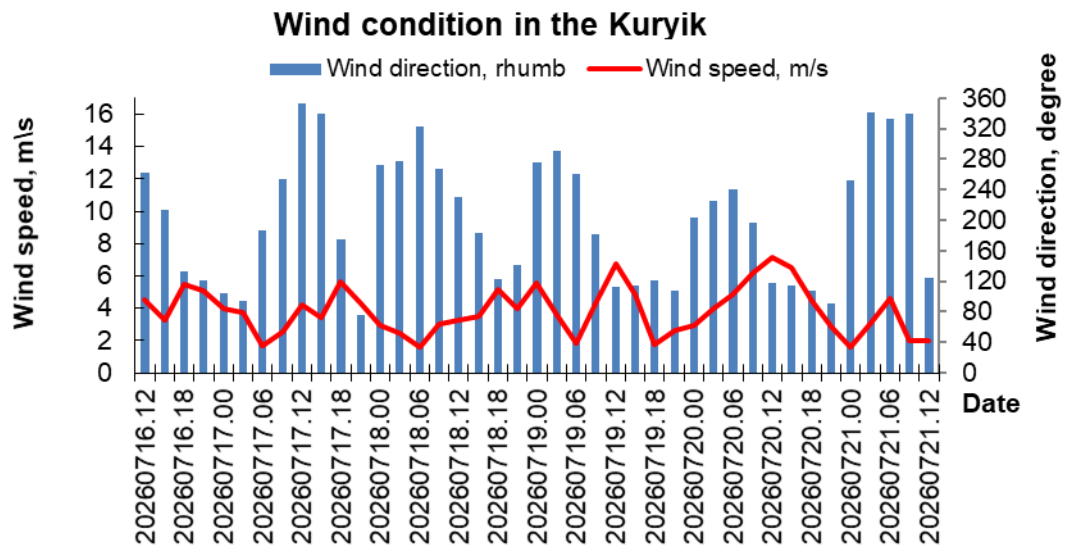
Wave condition in the Fetisovo



Date time	Fetisovo				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.35	SW	2.2	3	SW
20260716.15	0.64	S	3.2	4	E
20260716.18	0.85	S	3.9	7	SE
20260716.21	0.95	S	4.4	5	SE
20260717.00	0.96	S	4.8	4	N
20260717.03	0.90	S	4.9	3	W
20260717.06	0.79	S	4.9	2	SW
20260717.09	0.67	S	4.7	4	W
20260717.12	0.62	S	3.8	6	W
20260717.15	0.64	S	3.2	5	W
20260717.18	0.58	S	3.0	5	E
20260717.21	0.52	SW	3.1	4	NE
20260718.00	0.46	W	3.2	3	NW
20260718.03	0.39	W	3.2	3	NW
20260718.06	0.35	W	3.1	3	NW
20260718.09	0.32	W	3.1	3	N
20260718.12	0.30	W	3.1	2	SW
20260718.15	0.30	W	2.9	5	E
20260718.18	0.45	W	2.6	7	E
20260718.21	0.59	W	2.8	5	E
20260719.00	0.58	W	2.9	6	W
20260719.03	0.53	W	3.1	4	W
20260719.06	0.51	S	3.3	1	E
20260719.09	0.48	S	3.4	4	E
20260719.12	0.51	W	3.2	7	E
20260719.15	0.51	W	3.0	5	SE
20260719.18	0.47	W	3.0	3	SE
20260719.21	0.44	W	3.1	3	E
20260720.00	0.41	W	3.2	3	SW
20260720.03	0.40	W	3.1	4	W
20260720.06	0.45	SW	2.8	6	W
20260720.09	0.49	SW	2.7	4	SW
20260720.12	0.48	W	2.9	4	SE
20260720.15	0.49	W	3.1	5	SE
20260720.18	0.51	W	2.9	5	E
20260720.21	0.47	W	2.9	4	E
20260721.00	0.42	W	3.1	2	W
20260721.03	0.39	W	3.2	3	W
20260721.06	0.42	W	3.0	3	SW
20260721.09	0.50	SW	3.1	3	SW
20260721.12	0.51	SW	3.3	3	E



Date time	Saura				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.34	S	3.1	1	SW
20260716.15	0.67	S	3.7	2	SE
20260716.18	0.84	SE	4.1	5	SE
20260716.21	0.91	SE	4.5	4	SE
20260717.00	0.94	SE	4.8	4	SE
20260717.03	0.93	SE	5.0	2	SE
20260717.06	0.89	SE	5.1	1	W
20260717.09	0.84	SE	5.1	4	W
20260717.12	0.88	S	4.3	8	W
20260717.15	0.89	S	3.9	5	W
20260717.18	0.78	S	3.8	4	S
20260717.21	0.67	S	3.9	4	E
20260718.00	0.59	S	3.9	3	N
20260718.03	0.51	S	3.8	4	W
20260718.06	0.45	S	3.7	4	NW
20260718.09	0.41	S	3.3	5	N
20260718.12	0.39	S	3.0	5	E
20260718.15	0.44	SW	2.7	6	SE
20260718.18	0.52	W	2.7	7	SE
20260718.21	0.55	NW	2.7	6	S
20260719.00	0.48	NW	2.8	5	NW
20260719.03	0.40	NW	2.9	4	W
20260719.06	0.36	W	3.1	2	E
20260719.09	0.35	W	3.1	3	NE
20260719.12	0.35	W	3.1	5	W
20260719.15	0.36	W	3.0	5	SW
20260719.18	0.44	W	3.0	4	S
20260719.21	0.50	W	3.1	4	S
20260720.00	0.46	W	3.2	4	E
20260720.03	0.47	W	2.9	6	SE
20260720.06	0.54	W	2.9	8	SW
20260720.09	0.56	SW	2.9	5	SW
20260720.12	0.47	SW	3.0	2	SE
20260720.15	0.43	W	2.8	5	SE
20260720.18	0.50	W	2.6	7	SE
20260720.21	0.50	W	2.8	4	SE
20260721.00	0.46	W	3.1	1	W
20260721.03	0.44	W	3.5	1	W
20260721.06	0.42	W	3.6	1	W
20260721.09	0.42	SW	3.4	2	NE
20260721.12	0.42	SW	3.3	3	E



Date time	Kuryk				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20260716.12	0.64	S	3.2	5	W
20260716.15	0.96	SE	3.9	3	SW
20260716.18	1.11	SE	4.3	6	SE
20260716.21	1.08	SE	4.6	5	SE
20260717.00	0.99	S	4.7	4	E
20260717.03	0.92	S	4.9	4	E
20260717.06	0.86	S	5.0	2	S
20260717.09	0.78	S	4.9	3	W
20260717.12	0.74	S	4.3	4	N
20260717.15	0.75	S	3.7	3	N
20260717.18	0.68	S	3.5	6	S
20260717.21	0.60	SW	3.5	4	E
20260718.00	0.53	SW	3.4	3	W
20260718.03	0.46	SW	3.5	2	W
20260718.06	0.40	SW	3.5	2	NW
20260718.09	0.36	W	3.4	3	W
20260718.12	0.33	W	3.3	3	SW
20260718.15	0.33	W	2.9	3	S
20260718.18	0.44	W	2.6	5	SE
20260718.21	0.55	NW	2.7	4	SE
20260719.00	0.52	NW	2.8	6	W
20260719.03	0.47	NW	3.0	4	W
20260719.06	0.43	NW	3.2	2	W
20260719.09	0.41	W	3.3	4	S
20260719.12	0.46	W	3.1	7	E
20260719.15	0.48	W	2.9	5	SE
20260719.18	0.51	W	3.0	2	SE
20260719.21	0.55	W	3.2	3	E
20260720.00	0.51	W	3.4	3	SW
20260720.03	0.47	W	3.4	4	SW
20260720.06	0.48	W	3.0	5	SW
20260720.09	0.48	W	2.9	6	S
20260720.12	0.62	W	3.0	7	SE
20260720.15	0.63	W	3.0	6	SE
20260720.18	0.57	W	2.9	4	E
20260720.21	0.48	W	2.9	3	E
20260721.00	0.40	W	3.0	2	W
20260721.03	0.37	W	3.1	3	N
20260721.06	0.43	SW	3.0	5	NW
20260721.09	0.53	SW	3.1	2	N
20260721.12	0.54	SW	3.3	2	SE

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

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Checked by: Zhagparova N.N.

RSE «Kazhydromet» – Caspian Sea Hydrometeorological Research Department

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