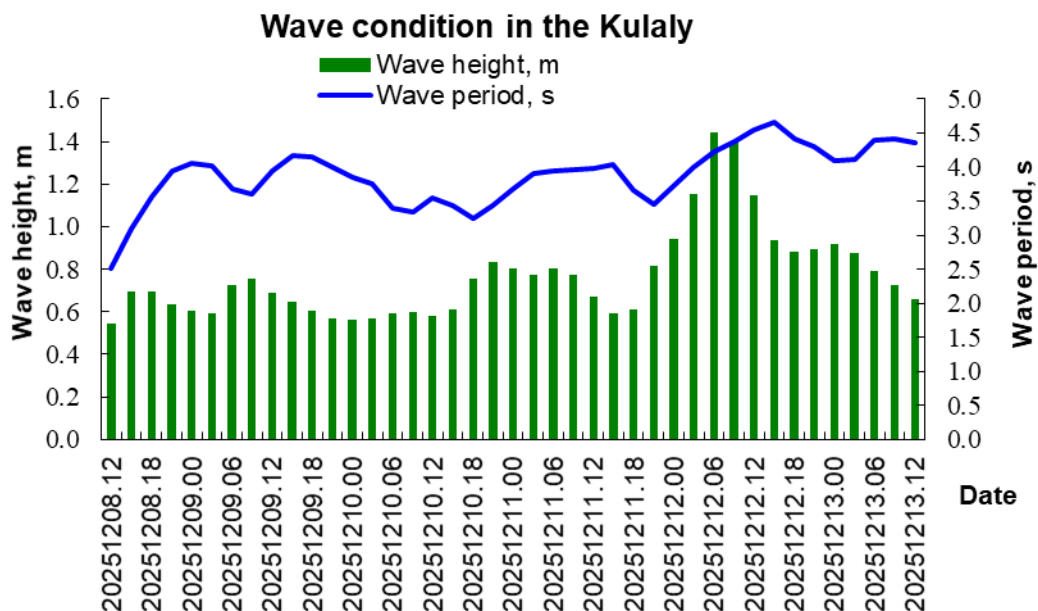
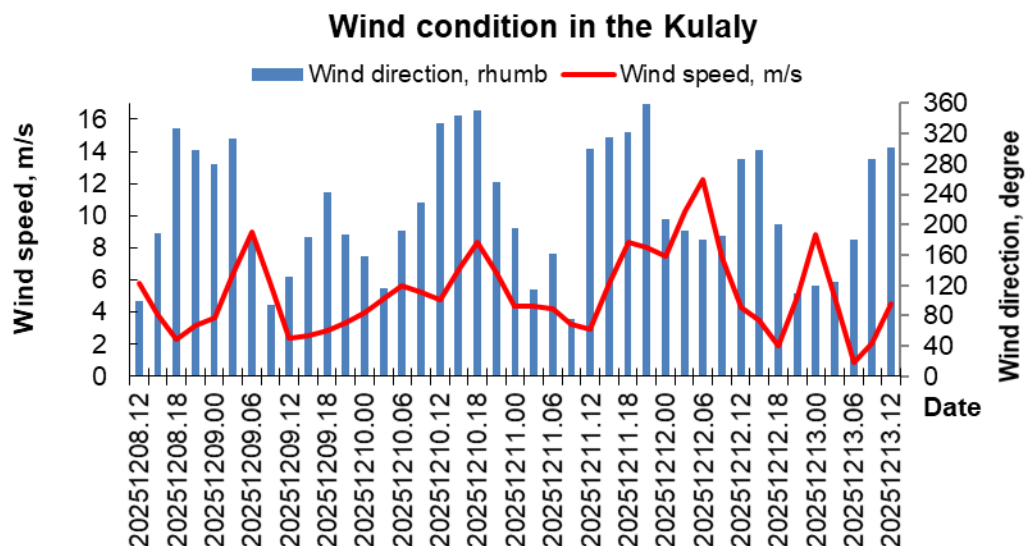




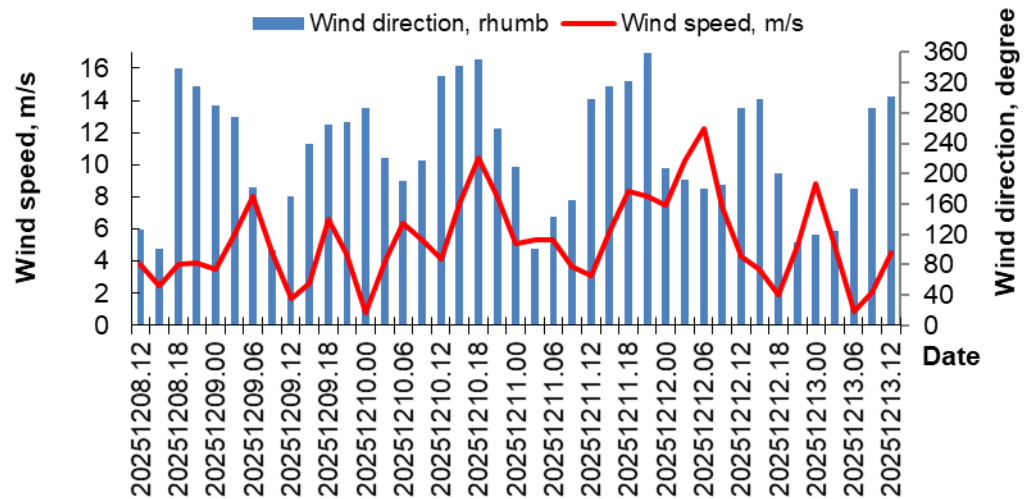
**MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN
RSE «KAZHYDROMET»**

**Wave and wind forecast for the Kazakhstan part of the Caspian Sea with a 5-day advance
using SWAN spectral model for the perio December 08 – 13, 2025.**

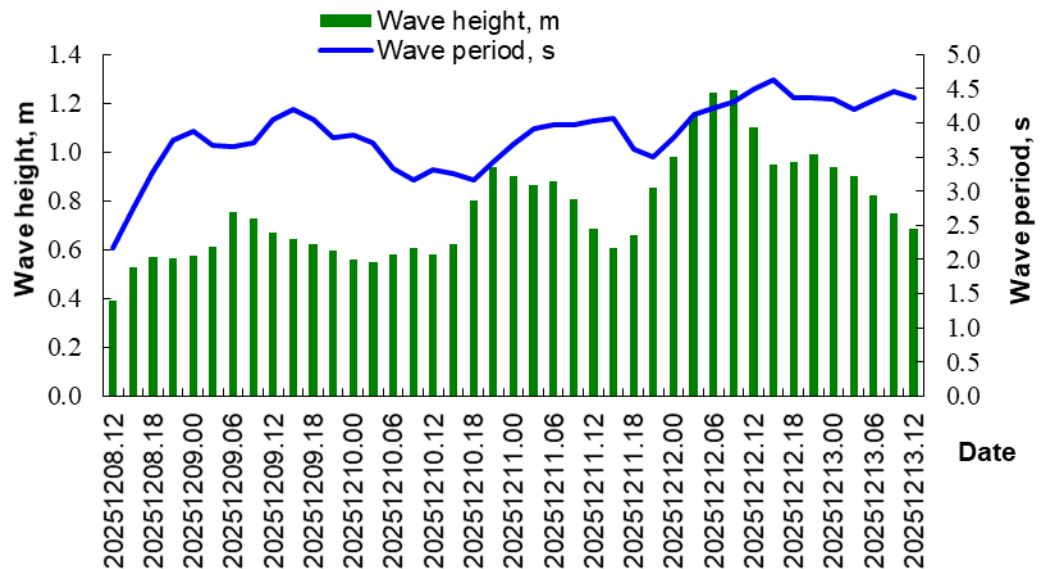


Date time	Kulaly				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.55	W	2.5	6	E
20251208.15	0.69	W	3.1	4	S
20251208.18	0.70	NW	3.6	2	NW
20251208.21	0.64	NW	3.9	3	NW
20251209.00	0.60	NW	4.0	4	W
20251209.03	0.59	NW	4.0	6	NW
20251209.06	0.72	W	3.7	9	S
20251209.09	0.76	W	3.6	6	E
20251209.12	0.69	W	3.9	2	SE
20251209.15	0.65	W	4.2	3	S
20251209.18	0.60	W	4.2	3	SW
20251209.21	0.57	W	4.0	3	S
20251210.00	0.56	SW	3.8	4	S
20251210.03	0.57	SW	3.7	5	SE
20251210.06	0.59	SW	3.4	6	S
20251210.09	0.60	SW	3.3	5	SW
20251210.12	0.58	SW	3.5	5	NW
20251210.15	0.61	SW	3.4	7	N
20251210.18	0.75	S	3.2	8	N
20251210.21	0.84	S	3.4	6	W
20251211.00	0.80	S	3.7	4	S
20251211.03	0.78	SW	3.9	4	SE
20251211.06	0.80	SW	3.9	4	S
20251211.09	0.77	SW	4.0	3	E
20251211.12	0.67	SW	4.0	3	NW
20251211.15	0.59	SW	4.0	6	NW
20251211.18	0.61	SW	3.7	8	NW
20251211.21	0.82	S	3.5	8	N
20251212.00	0.94	S	3.7	7	SW
20251212.03	1.15	SW	4.0	10	S
20251212.06	1.44	SW	4.2	12	S
20251212.09	1.40	SW	4.4	7	S
20251212.12	1.14	SW	4.6	4	W
20251212.15	0.94	SW	4.7	3	NW
20251212.18	0.88	SW	4.4	2	S
20251212.21	0.89	S	4.3	5	E
20251213.00	0.92	SW	4.1	9	SE
20251213.03	0.87	SW	4.1	5	SE
20251213.06	0.79	SW	4.4	1	S
20251213.09	0.73	SW	4.4	2	W
20251213.12	0.66	SW	4.4	5	NW

Wind condition in the Fort-Shevchenko

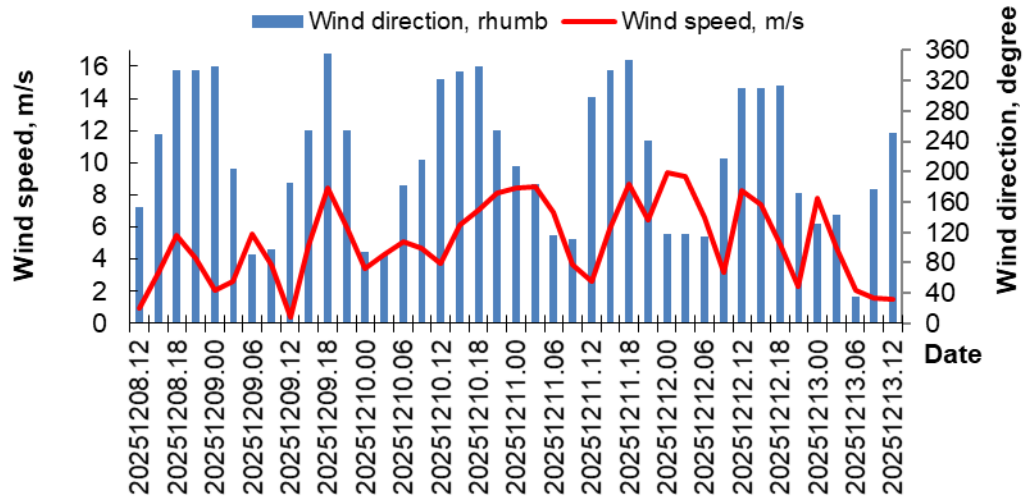


Wave condition in the Fort-Shevchenko

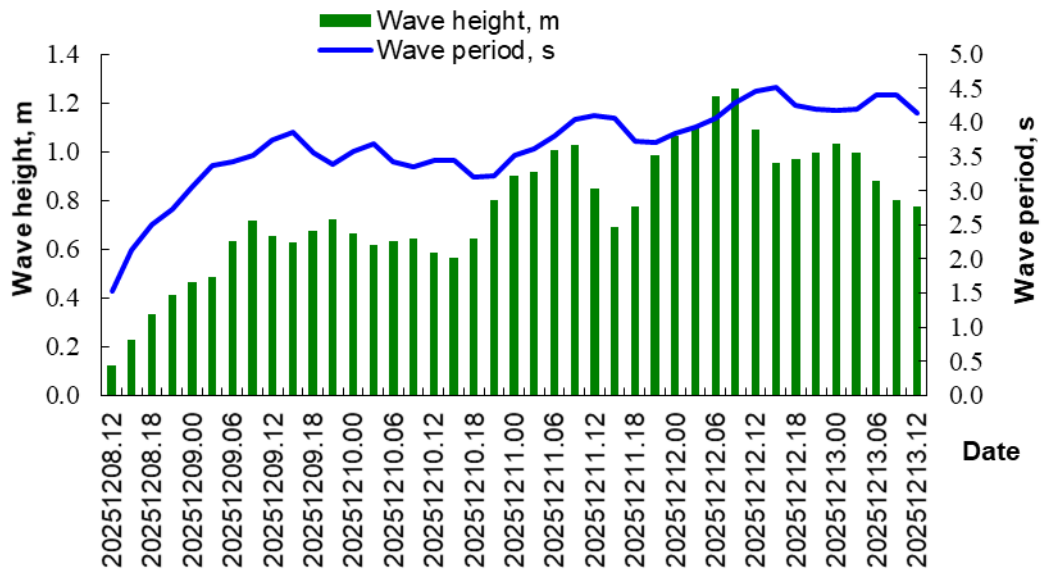


Date time	Fort-Shevchenko				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.39	NW	2.2	4	SE
20251208.15	0.53	NW	2.7	2	E
20251208.18	0.57	NW	3.3	4	N
20251208.21	0.56	NW	3.7	4	NW
20251209.00	0.57	NW	3.9	3	W
20251209.03	0.61	NW	3.7	6	W
20251209.06	0.75	NW	3.6	8	S
20251209.09	0.73	W	3.7	5	E
20251209.12	0.67	W	4.0	2	S
20251209.15	0.64	W	4.2	3	SW
20251209.18	0.62	W	4.0	7	W
20251209.21	0.60	W	3.8	4	W
20251210.00	0.56	W	3.8	1	W
20251210.03	0.55	W	3.7	4	SW
20251210.06	0.58	W	3.3	6	S
20251210.09	0.61	SW	3.2	5	SW
20251210.12	0.58	SW	3.3	4	NW
20251210.15	0.62	SW	3.3	8	N
20251210.18	0.80	S	3.2	10	N
20251210.21	0.94	S	3.4	8	W
20251211.00	0.90	S	3.7	5	SW
20251211.03	0.86	SW	3.9	5	E
20251211.06	0.88	SW	4.0	5	SE
20251211.09	0.81	SW	4.0	4	S
20251211.12	0.68	SW	4.0	3	NW
20251211.15	0.61	SW	4.1	6	NW
20251211.18	0.66	SW	3.6	8	NW
20251211.21	0.85	S	3.5	8	N
20251212.00	0.98	SW	3.8	7	SW
20251212.03	1.15	SW	4.1	10	S
20251212.06	1.25	SW	4.2	12	S
20251212.09	1.25	SW	4.3	7	S
20251212.12	1.10	SW	4.5	4	W
20251212.15	0.95	SW	4.6	3	NW
20251212.18	0.96	SW	4.4	2	S
20251212.21	0.99	SW	4.4	5	E
20251213.00	0.94	SW	4.3	9	SE
20251213.03	0.90	SW	4.2	5	SE
20251213.06	0.82	SW	4.3	1	S
20251213.09	0.75	SW	4.5	2	W
20251213.12	0.69	SW	4.4	5	NW

Wind condition in the Aktau

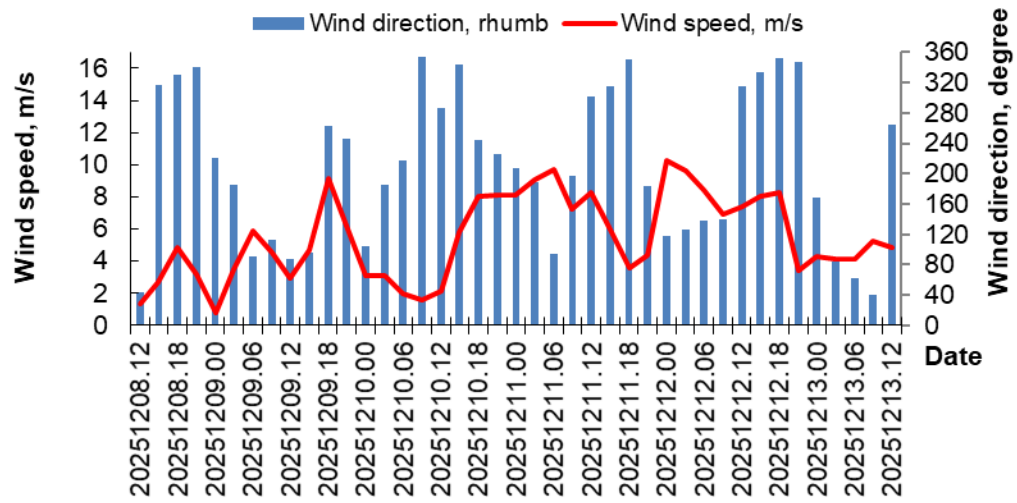


Wave condition in the Aktau

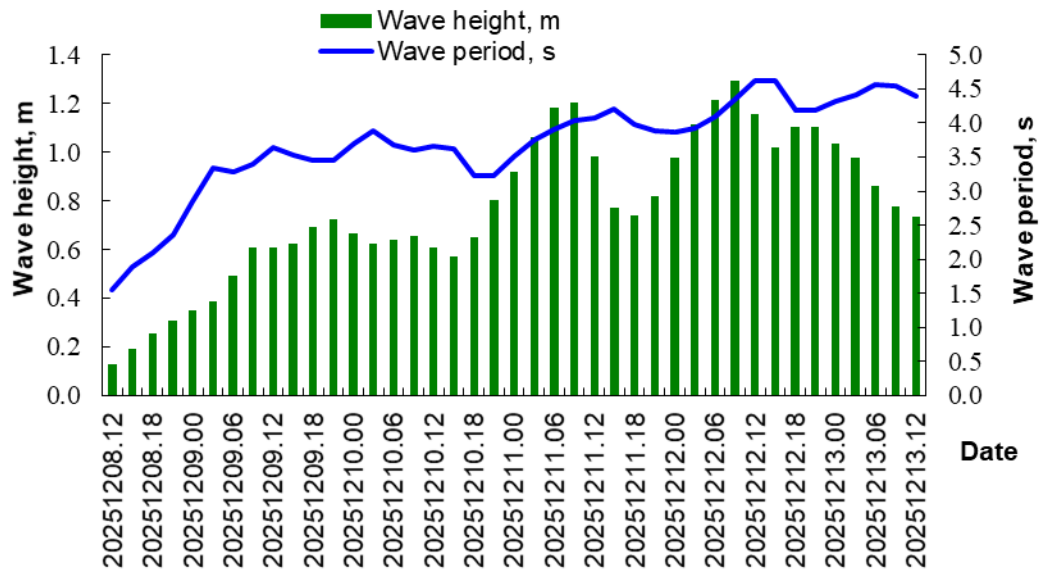


Date time	Aktau				
	Wave height, m	Направление волны, румб	Wave height, m	Скорость ветра, м/с	Wave height, m
20251208.12	0.12	NW	1.5	1	SE
20251208.15	0.23	N	2.1	3	W
20251208.18	0.33	N	2.5	6	NW
20251208.21	0.41	NW	2.7	4	NW
20251209.00	0.46	W	3.0	2	N
20251209.03	0.49	W	3.4	3	SW
20251209.06	0.63	W	3.4	6	E
20251209.09	0.72	W	3.5	4	E
20251209.12	0.66	W	3.7	0	S
20251209.15	0.63	W	3.9	5	W
20251209.18	0.68	W	3.5	8	N
20251209.21	0.72	SW	3.4	6	W
20251210.00	0.67	SW	3.6	3	E
20251210.03	0.62	SW	3.7	4	E
20251210.06	0.63	W	3.4	5	S
20251210.09	0.65	W	3.3	5	SW
20251210.12	0.59	SW	3.5	4	NW
20251210.15	0.56	SW	3.4	6	NW
20251210.18	0.64	S	3.2	7	N
20251210.21	0.80	S	3.2	8	W
20251211.00	0.90	SW	3.5	8	SW
20251211.03	0.92	SW	3.6	9	S
20251211.06	1.01	SW	3.8	7	SE
20251211.09	1.03	SW	4.1	4	E
20251211.12	0.85	SW	4.1	3	NW
20251211.15	0.69	SW	4.1	6	NW
20251211.18	0.77	SW	3.7	9	N
20251211.21	0.99	S	3.7	6	SW
20251212.00	1.06	SW	3.8	9	SE
20251212.03	1.11	SW	3.9	9	SE
20251212.06	1.23	W	4.1	7	SE
20251212.09	1.26	W	4.3	3	SW
20251212.12	1.09	SW	4.5	8	NW
20251212.15	0.95	SW	4.5	7	NW
20251212.18	0.97	SW	4.2	5	NW
20251212.21	1.00	SW	4.2	2	S
20251213.00	1.03	SW	4.2	8	SE
20251213.03	1.00	W	4.2	5	SE
20251213.06	0.88	SW	4.4	2	NE
20251213.09	0.80	SW	4.4	2	S
20251213.12	0.78	W	4.1	2	W

Wind condition in the Peschanyi

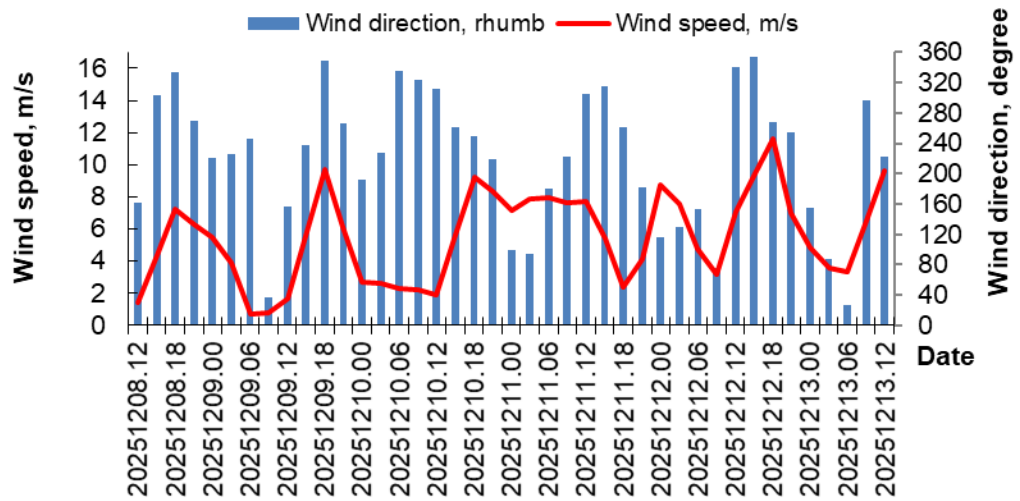


Wave condition in the Peschanyi

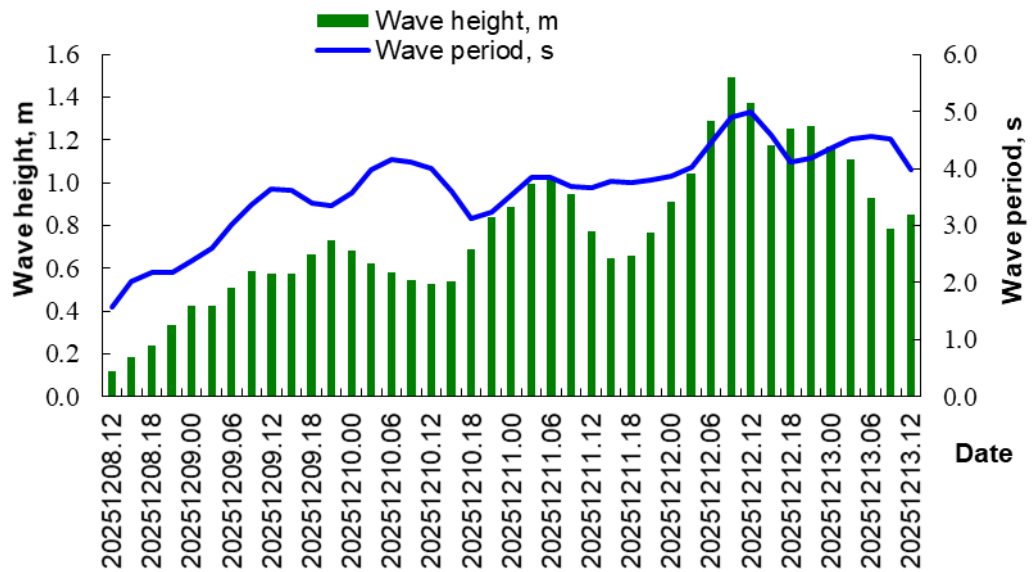


Date time	Peschanyi (Isan)				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.13	NE	1.5	1	NE
20251208.15	0.19	NE	1.9	3	NW
20251208.18	0.25	NE	2.1	5	NW
20251208.21	0.31	N	2.4	3	N
20251209.00	0.35	W	2.9	1	SW
20251209.03	0.39	W	3.3	4	S
20251209.06	0.49	W	3.3	6	E
20251209.09	0.61	W	3.4	5	SE
20251209.12	0.61	W	3.6	3	E
20251209.15	0.62	W	3.5	5	E
20251209.18	0.69	W	3.5	9	W
20251209.21	0.73	SW	3.5	6	SW
20251210.00	0.67	SW	3.7	3	E
20251210.03	0.63	SW	3.9	3	S
20251210.06	0.64	W	3.7	2	SW
20251210.09	0.65	W	3.6	2	N
20251210.12	0.61	SW	3.7	2	W
20251210.15	0.57	SW	3.6	6	N
20251210.18	0.65	SW	3.2	8	SW
20251210.21	0.80	SW	3.2	8	SW
20251211.00	0.92	SW	3.5	8	SW
20251211.03	1.06	SW	3.7	9	S
20251211.06	1.18	SW	3.9	10	E
20251211.09	1.20	W	4.0	7	S
20251211.12	0.98	SW	4.1	8	NW
20251211.15	0.77	SW	4.2	6	NW
20251211.18	0.74	SW	4.0	4	N
20251211.21	0.82	SW	3.9	4	S
20251212.00	0.98	SW	3.9	10	SE
20251212.03	1.11	W	3.9	10	SE
20251212.06	1.21	W	4.1	8	SE
20251212.09	1.30	W	4.4	7	SE
20251212.12	1.16	W	4.6	7	NW
20251212.15	1.02	SW	4.6	8	NW
20251212.18	1.10	SW	4.2	8	N
20251212.21	1.11	SW	4.2	3	N
20251213.00	1.04	SW	4.3	4	S
20251213.03	0.98	SW	4.4	4	E
20251213.06	0.86	SW	4.6	4	NE
20251213.09	0.78	SW	4.5	5	NE
20251213.12	0.74	SW	4.4	5	W

Wind condition in the Fetisovo

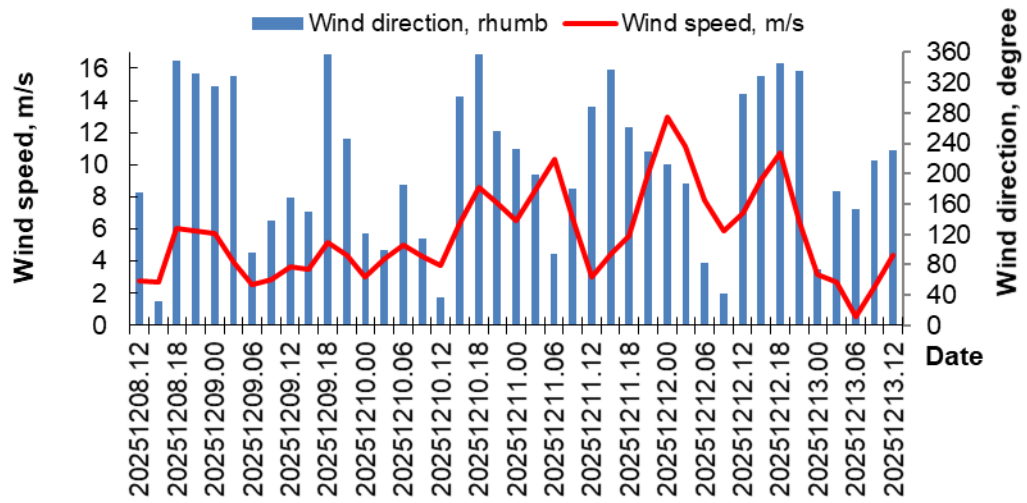


Wave condition in the Fetisovo

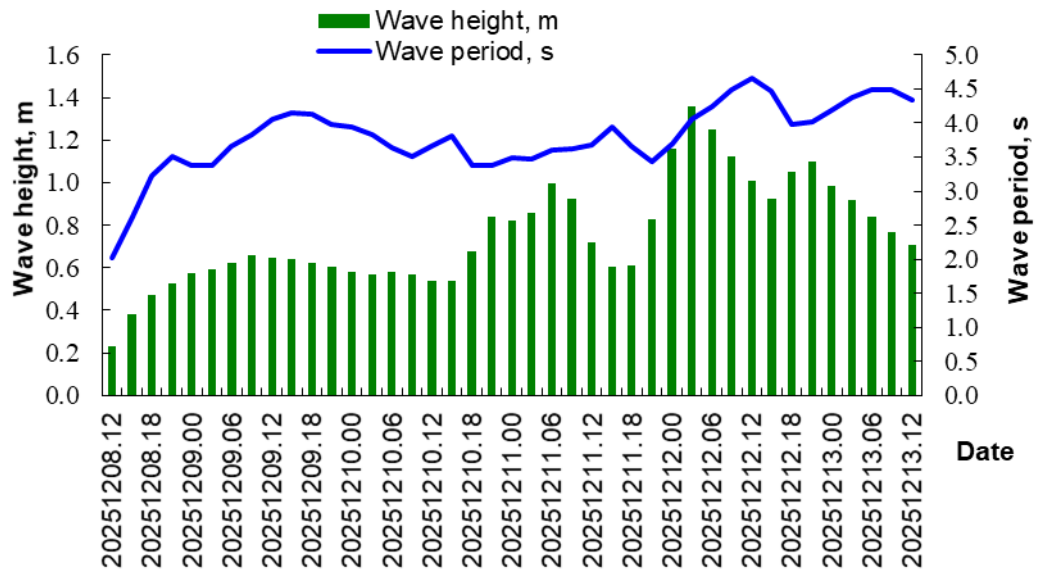


Date time	Fetisovo				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.12	W	1.6	1	S
20251208.15	0.19	W	2.0	4	NW
20251208.18	0.24	SW	2.2	7	NW
20251208.21	0.34	SW	2.2	6	W
20251209.00	0.42	SW	2.4	6	SW
20251209.03	0.43	SW	2.6	4	SW
20251209.06	0.51	W	3.0	1	SW
20251209.09	0.59	W	3.4	1	NE
20251209.12	0.57	W	3.6	2	SE
20251209.15	0.58	W	3.6	6	SW
20251209.18	0.66	W	3.4	10	N
20251209.21	0.73	SW	3.3	6	W
20251210.00	0.68	SW	3.6	3	S
20251210.03	0.63	SW	4.0	3	SW
20251210.06	0.58	W	4.2	2	NW
20251210.09	0.55	W	4.1	2	NW
20251210.12	0.53	W	4.0	2	NW
20251210.15	0.54	SW	3.6	6	W
20251210.18	0.69	SW	3.1	9	W
20251210.21	0.84	SW	3.2	8	SW
20251211.00	0.89	SW	3.5	7	E
20251211.03	1.00	SW	3.8	8	E
20251211.06	1.01	W	3.8	8	S
20251211.09	0.95	W	3.7	8	SW
20251211.12	0.77	SW	3.7	8	NW
20251211.15	0.65	SW	3.8	5	NW
20251211.18	0.66	SW	3.8	2	W
20251211.21	0.77	SW	3.8	4	S
20251212.00	0.91	SW	3.9	9	SE
20251212.03	1.04	W	4.0	8	SE
20251212.06	1.29	W	4.5	5	SE
20251212.09	1.49	W	4.9	3	E
20251212.12	1.38	W	5.0	7	N
20251212.15	1.18	SW	4.6	9	N
20251212.18	1.25	SW	4.1	12	W
20251212.21	1.26	S	4.2	7	W
20251213.00	1.17	SW	4.4	5	SE
20251213.03	1.11	W	4.5	4	E
20251213.06	0.93	W	4.6	3	NE
20251213.09	0.78	W	4.5	7	NW
20251213.12	0.85	SW	4.0	10	SW

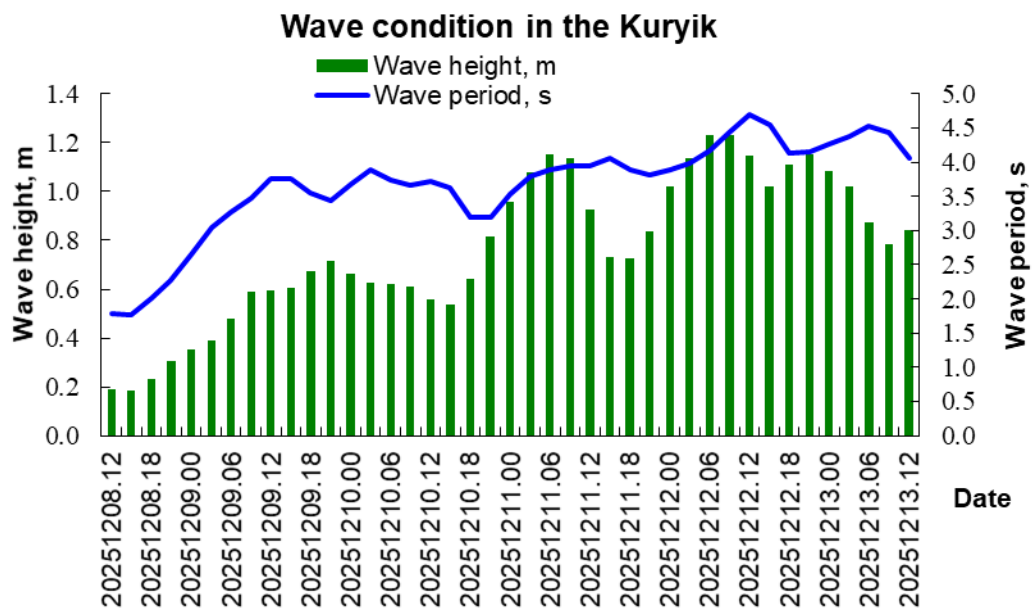
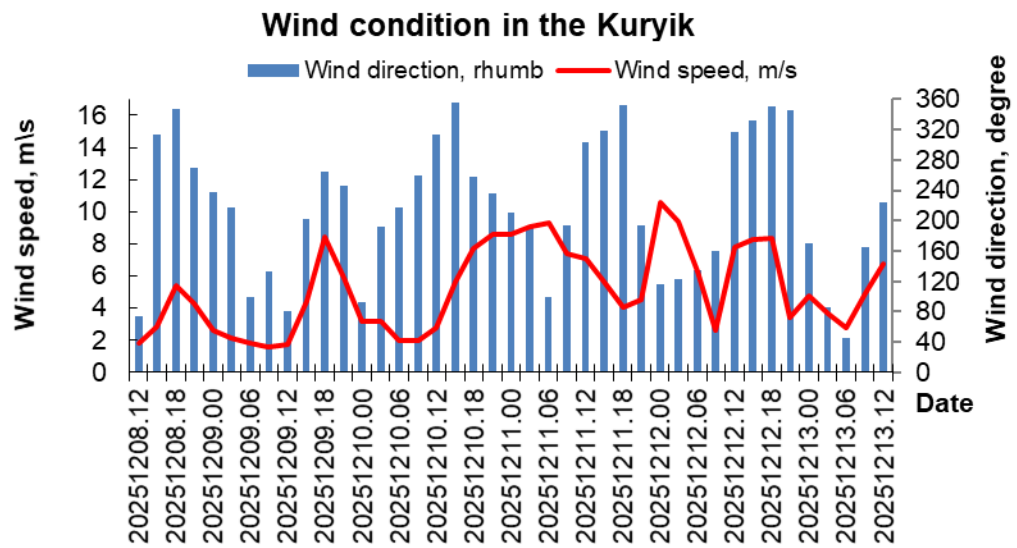
Wind condition in the Saura



Wave condition in the Saura



Date time	Saura				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.23	N	2.0	3	S
20251208.15	0.38	NW	2.6	3	NE
20251208.18	0.47	NW	3.2	6	N
20251208.21	0.53	NW	3.5	6	NW
20251209.00	0.57	W	3.4	6	NW
20251209.03	0.59	W	3.4	4	NW
20251209.06	0.63	W	3.7	3	E
20251209.09	0.66	W	3.8	3	SE
20251209.12	0.65	W	4.1	4	S
20251209.15	0.64	W	4.2	3	SE
20251209.18	0.62	W	4.1	5	N
20251209.21	0.61	W	4.0	4	SW
20251210.00	0.58	W	3.9	3	SE
20251210.03	0.57	W	3.8	4	E
20251210.06	0.58	SW	3.6	5	S
20251210.09	0.57	W	3.5	4	SE
20251210.12	0.54	SW	3.7	4	NE
20251210.15	0.54	SW	3.8	6	NW
20251210.18	0.68	S	3.4	9	N
20251210.21	0.84	S	3.4	8	W
20251211.00	0.82	S	3.5	7	SW
20251211.03	0.86	SW	3.5	8	S
20251211.06	1.00	SW	3.6	10	E
20251211.09	0.93	SW	3.6	7	S
20251211.12	0.72	SW	3.7	3	W
20251211.15	0.60	SW	3.9	4	N
20251211.18	0.61	SW	3.7	6	W
20251211.21	0.83	SW	3.4	9	SW
20251212.00	1.16	SW	3.7	13	SW
20251212.03	1.36	SW	4.1	11	S
20251212.06	1.25	SW	4.2	8	E
20251212.09	1.13	SW	4.5	6	NE
20251212.12	1.01	SW	4.7	7	NW
20251212.15	0.93	SW	4.5	9	NW
20251212.18	1.05	SW	4.0	11	N
20251212.21	1.10	S	4.0	6	NW
20251213.00	0.98	SW	4.2	3	E
20251213.03	0.92	SW	4.4	3	S
20251213.06	0.84	SW	4.5	1	SE
20251213.09	0.77	SW	4.5	2	SW
20251213.12	0.71	SW	4.3	4	SW



Date time	Kuryk				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20251208.12	0.19	N	1.8	2	E
20251208.15	0.18	NE	1.8	3	NW
20251208.18	0.23	SE	2.0	5	N
20251208.21	0.31	SW	2.3	4	W
20251209.00	0.35	W	2.6	3	SW
20251209.03	0.39	W	3.0	2	SW
20251209.06	0.48	W	3.3	2	E
20251209.09	0.59	W	3.5	2	SE
20251209.12	0.59	W	3.7	2	E
20251209.15	0.60	W	3.8	4	SW
20251209.18	0.67	W	3.5	8	W
20251209.21	0.72	SW	3.4	6	SW
20251210.00	0.66	SW	3.7	3	E
20251210.03	0.62	SW	3.9	3	S
20251210.06	0.62	W	3.7	2	SW
20251210.09	0.61	W	3.7	2	W
20251210.12	0.56	SW	3.7	3	NW
20251210.15	0.54	SW	3.6	6	N
20251210.18	0.64	SW	3.2	8	W
20251210.21	0.82	SW	3.2	9	SW
20251211.00	0.96	SW	3.5	9	SW
20251211.03	1.08	SW	3.8	9	S
20251211.06	1.15	W	3.9	9	E
20251211.09	1.13	W	4.0	7	S
20251211.12	0.92	W	3.9	7	NW
20251211.15	0.73	SW	4.1	6	NW
20251211.18	0.72	SW	3.9	4	N
20251211.21	0.84	SW	3.8	5	S
20251212.00	1.02	SW	3.9	11	SE
20251212.03	1.13	W	4.0	9	SE
20251212.06	1.23	W	4.2	6	SE
20251212.09	1.23	W	4.4	3	S
20251212.12	1.15	W	4.7	8	NW
20251212.15	1.02	SW	4.6	8	NW
20251212.18	1.11	SW	4.1	8	N
20251212.21	1.15	S	4.2	3	N
20251213.00	1.09	SW	4.3	5	S
20251213.03	1.02	W	4.4	4	E
20251213.06	0.88	W	4.5	3	NE
20251213.09	0.78	W	4.4	5	S
20251213.12	0.84	SW	4.1	7	SW

**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