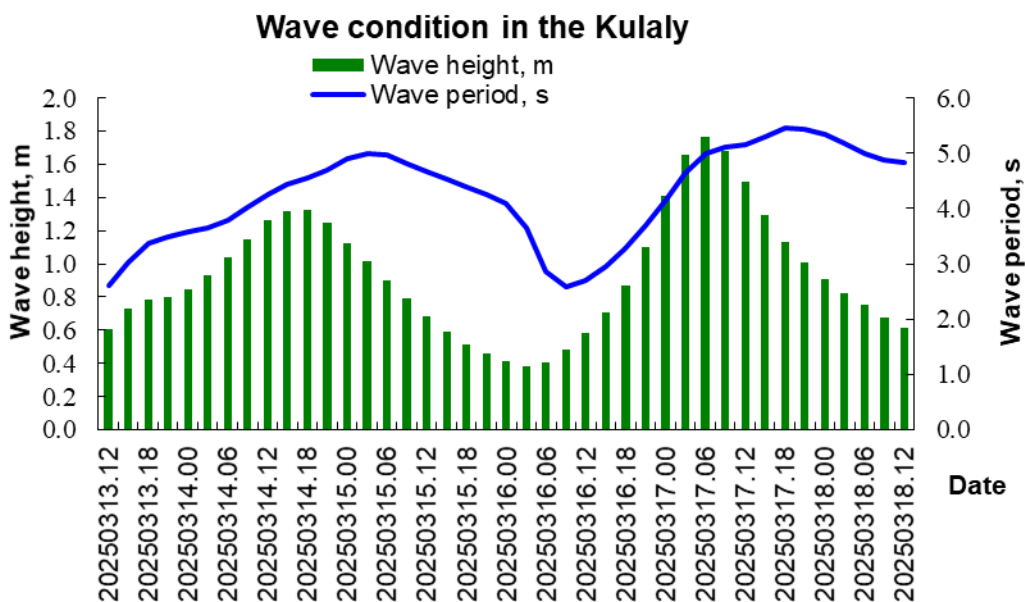
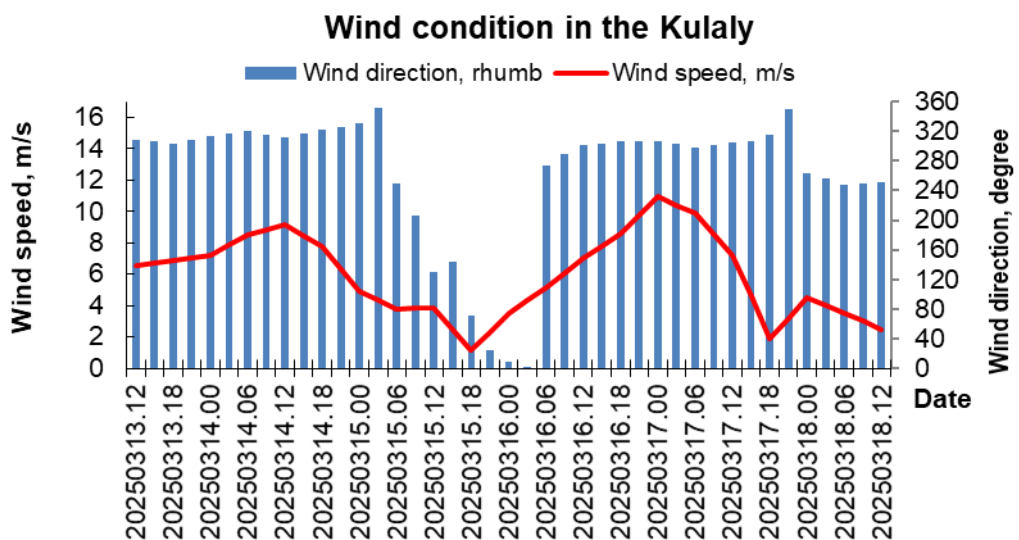




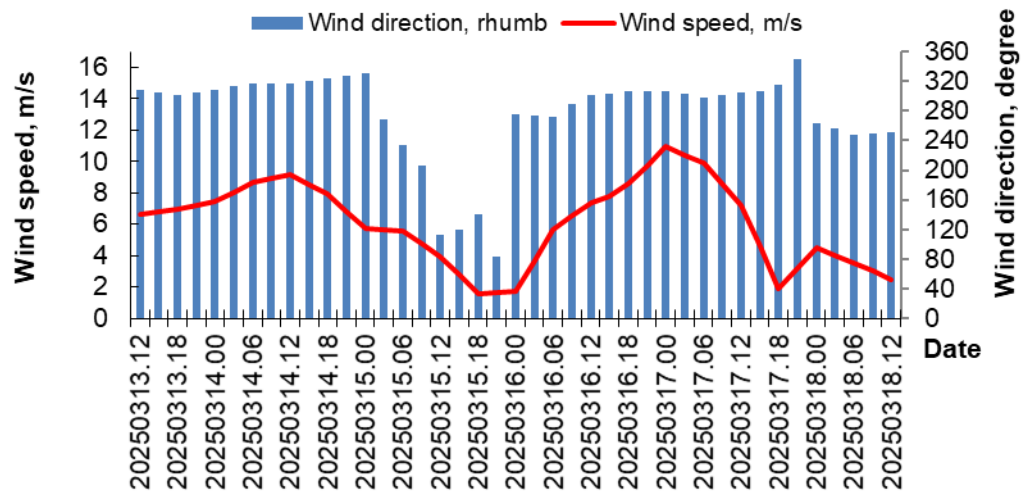
**MINISTRY OF ECOLOGY AND NATURAL RESOURCES
OF THE REPUBLIC OF KAZAKHSTAN
RSE «KAZHYDROMET»**

**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 13 – 18 , 2025.**

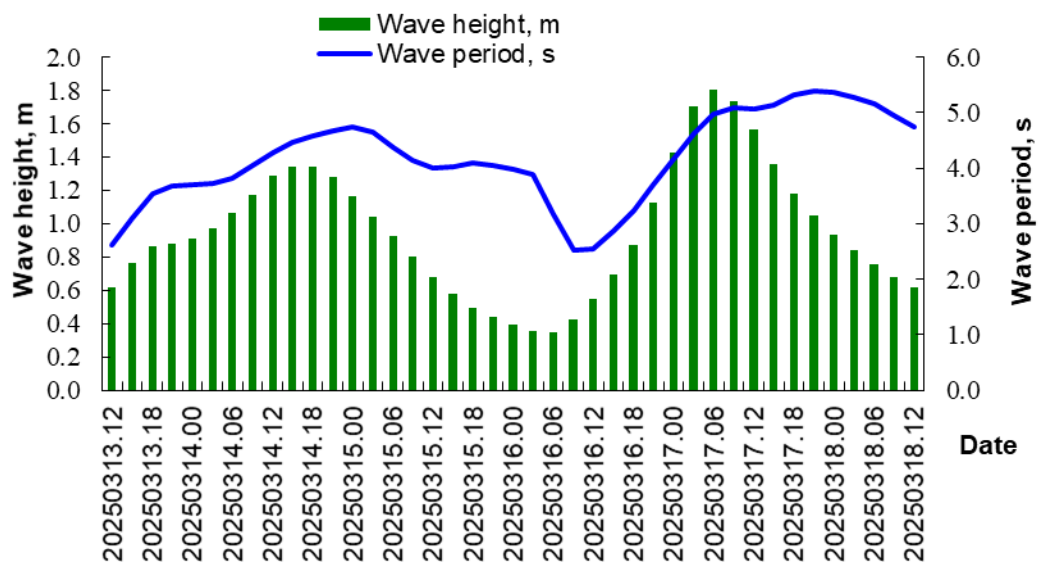


Date time	Kulaly				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.61	SE	2.6	7	NW
20250313.15	0.73	SE	3.0	7	NW
20250313.18	0.79	SE	3.4	7	NW
20250313.21	0.80	SE	3.5	7	NW
20250314.00	0.85	SE	3.6	7	NW
20250314.03	0.93	SE	3.7	8	NW
20250314.06	1.04	SE	3.8	9	NW
20250314.09	1.15	SE	4.0	9	NW
20250314.12	1.26	SE	4.2	9	NW
20250314.15	1.32	E	4.4	8	NW
20250314.18	1.32	E	4.6	8	NW
20250314.21	1.25	E	4.7	6	NW
20250315.00	1.13	E	4.9	5	NW
20250315.03	1.01	E	5.0	4	N
20250315.06	0.90	E	5.0	4	W
20250315.09	0.79	E	4.8	4	SW
20250315.12	0.69	E	4.7	4	SE
20250315.15	0.59	E	4.5	3	SE
20250315.18	0.52	SE	4.4	1	E
20250315.21	0.46	SE	4.2	2	NE
20250316.00	0.41	SE	4.1	4	N
20250316.03	0.38	SE	3.6	4	N
20250316.06	0.40	SE	2.9	5	W
20250316.09	0.48	E	2.6	6	W
20250316.12	0.58	E	2.7	7	NW
20250316.15	0.70	SE	2.9	8	NW
20250316.18	0.87	SE	3.3	9	NW
20250316.21	1.10	SE	3.7	10	NW
20250317.00	1.41	SE	4.2	11	NW
20250317.03	1.66	SE	4.6	10	NW
20250317.06	1.76	E	5.0	10	NW
20250317.09	1.68	E	5.1	9	NW
20250317.12	1.49	E	5.2	7	NW
20250317.15	1.29	E	5.3	5	NW
20250317.18	1.13	E	5.5	2	NW
20250317.21	1.01	E	5.4	3	N
20250318.00	0.91	E	5.4	4	W
20250318.03	0.83	E	5.2	4	W
20250318.06	0.75	E	5.0	4	W
20250318.09	0.68	E	4.9	3	W
20250318.12	0.61	SE	4.8	2	W

Wind condition in the Fort-Shevchenko

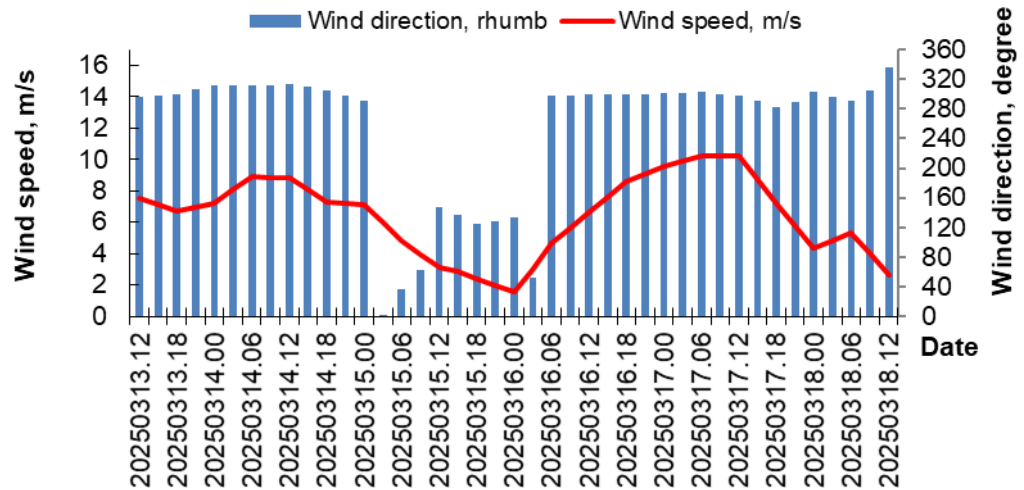


Wave condition in the Fort-Shevchenko

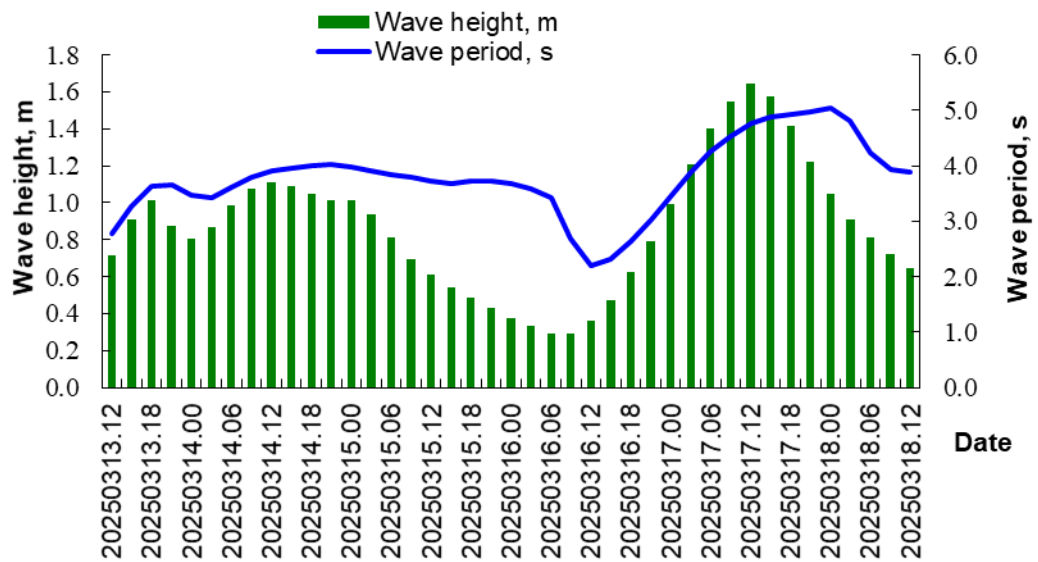


Date time	Fort-Shevchenko				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.61	SE	2.6	7	NW
20250313.15	0.77	SE	3.1	7	NW
20250313.18	0.86	SE	3.5	7	NW
20250313.21	0.88	SE	3.7	7	NW
20250314.00	0.91	SE	3.7	7	NW
20250314.03	0.97	SE	3.7	8	NW
20250314.06	1.07	SE	3.8	9	NW
20250314.09	1.17	SE	4.1	9	NW
20250314.12	1.29	SE	4.3	9	NW
20250314.15	1.34	SE	4.5	9	NW
20250314.18	1.35	E	4.6	8	NW
20250314.21	1.28	E	4.7	7	NW
20250315.00	1.16	E	4.7	6	NW
20250315.03	1.04	E	4.6	6	W
20250315.06	0.92	E	4.4	6	SW
20250315.09	0.80	SE	4.1	5	SW
20250315.12	0.68	SE	4.0	4	SE
20250315.15	0.57	SE	4.0	3	SE
20250315.18	0.49	SE	4.1	2	SE
20250315.21	0.44	SE	4.0	2	E
20250316.00	0.39	SE	4.0	2	W
20250316.03	0.36	SE	3.9	4	W
20250316.06	0.35	SE	3.2	6	W
20250316.09	0.42	E	2.5	7	W
20250316.12	0.55	E	2.6	7	NW
20250316.15	0.70	SE	2.9	8	NW
20250316.18	0.88	SE	3.2	9	NW
20250316.21	1.13	SE	3.7	10	NW
20250317.00	1.43	SE	4.2	11	NW
20250317.03	1.70	SE	4.6	10	NW
20250317.06	1.81	E	5.0	10	NW
20250317.09	1.74	E	5.1	9	NW
20250317.12	1.57	E	5.1	7	NW
20250317.15	1.36	E	5.1	5	NW
20250317.18	1.18	E	5.3	2	NW
20250317.21	1.05	E	5.4	3	N
20250318.00	0.94	E	5.4	4	W
20250318.03	0.84	E	5.3	4	W
20250318.06	0.76	E	5.1	4	W
20250318.09	0.68	E	5.0	3	W
20250318.12	0.62	E	4.7	2	W

Wind condition in the Aktau

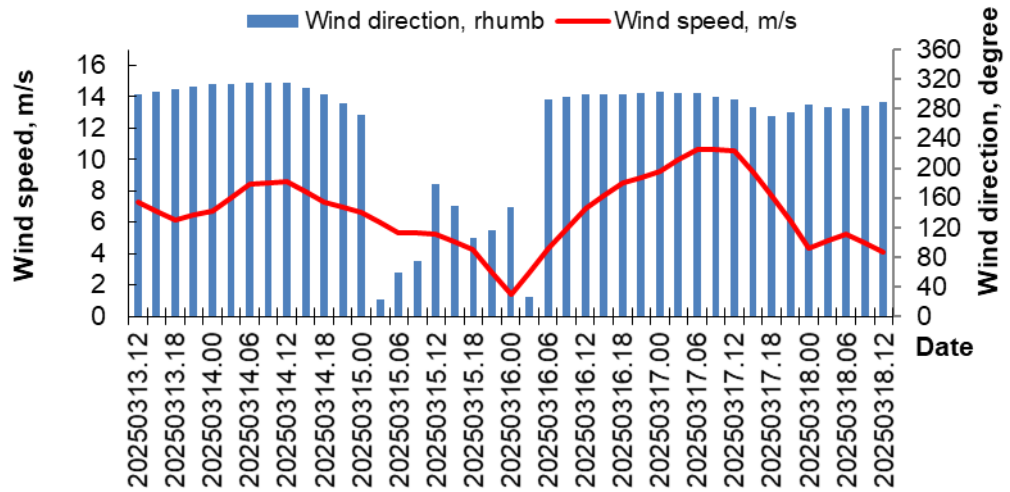


Wave condition in the Aktau

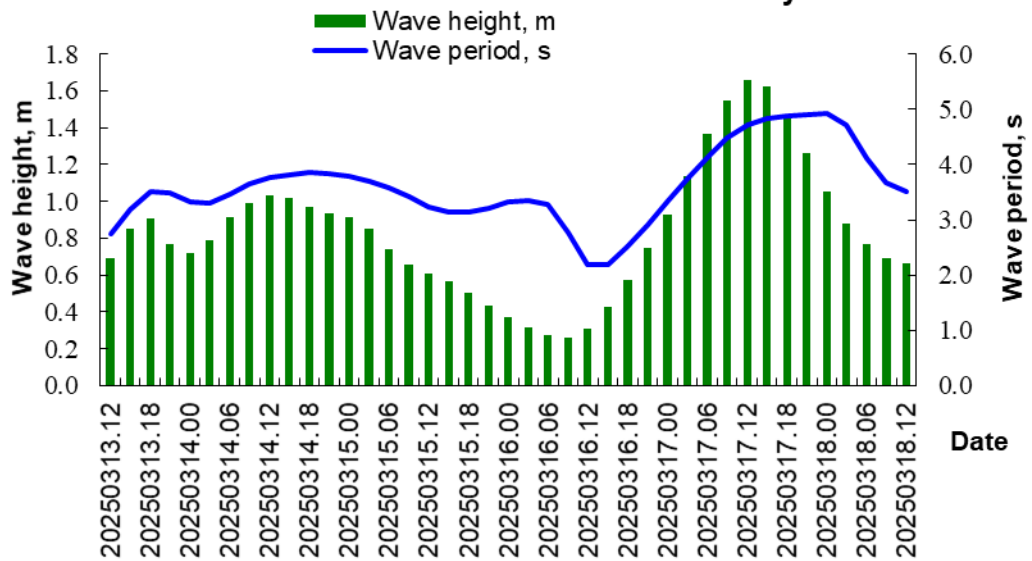


Date time	Aktau				
	Wave height, m	Направление волны, румб	Wave height, m	Скорость ветра, м/с	Wave height, m
20250313.12	0.72	SE	2.8	8	NW
20250313.15	0.91	SE	3.3	7	NW
20250313.18	1.02	SE	3.6	7	NW
20250313.21	0.87	E	3.7	7	NW
20250314.00	0.80	SE	3.5	7	NW
20250314.03	0.87	SE	3.4	8	NW
20250314.06	0.99	SE	3.6	9	NW
20250314.09	1.08	SE	3.8	9	NW
20250314.12	1.11	SE	3.9	9	NW
20250314.15	1.09	SE	4.0	8	NW
20250314.18	1.05	E	4.0	7	NW
20250314.21	1.02	E	4.0	7	NW
20250315.00	1.01	E	4.0	7	W
20250315.03	0.93	E	3.9	6	N
20250315.06	0.81	E	3.8	5	NE
20250315.09	0.69	E	3.8	4	NE
20250315.12	0.61	E	3.7	3	SE
20250315.15	0.54	E	3.7	3	SE
20250315.18	0.48	E	3.7	2	SE
20250315.21	0.43	E	3.7	2	SE
20250316.00	0.38	SE	3.7	2	SE
20250316.03	0.33	SE	3.6	3	NE
20250316.06	0.29	SE	3.4	5	NW
20250316.09	0.29	SE	2.7	6	NW
20250316.12	0.36	SE	2.2	7	NW
20250316.15	0.47	SE	2.3	8	NW
20250316.18	0.62	SE	2.6	9	NW
20250316.21	0.79	SE	3.0	9	NW
20250317.00	0.99	SE	3.5	10	NW
20250317.03	1.21	E	3.9	10	NW
20250317.06	1.40	E	4.3	10	NW
20250317.09	1.54	E	4.5	10	NW
20250317.12	1.64	E	4.8	10	NW
20250317.15	1.58	E	4.9	9	W
20250317.18	1.41	E	4.9	7	W
20250317.21	1.23	E	5.0	6	W
20250318.00	1.05	E	5.0	4	NW
20250318.03	0.91	E	4.8	5	NW
20250318.06	0.82	E	4.2	5	W
20250318.09	0.72	E	3.9	4	NW
20250318.12	0.64	E	3.9	3	NW

Wind condition in the Peschanyi

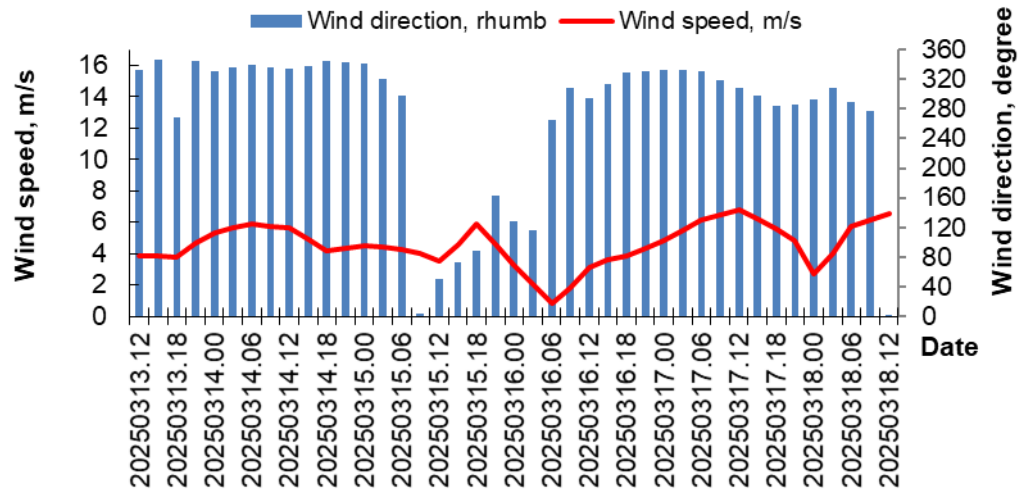


Wave condition in the Peschanyi

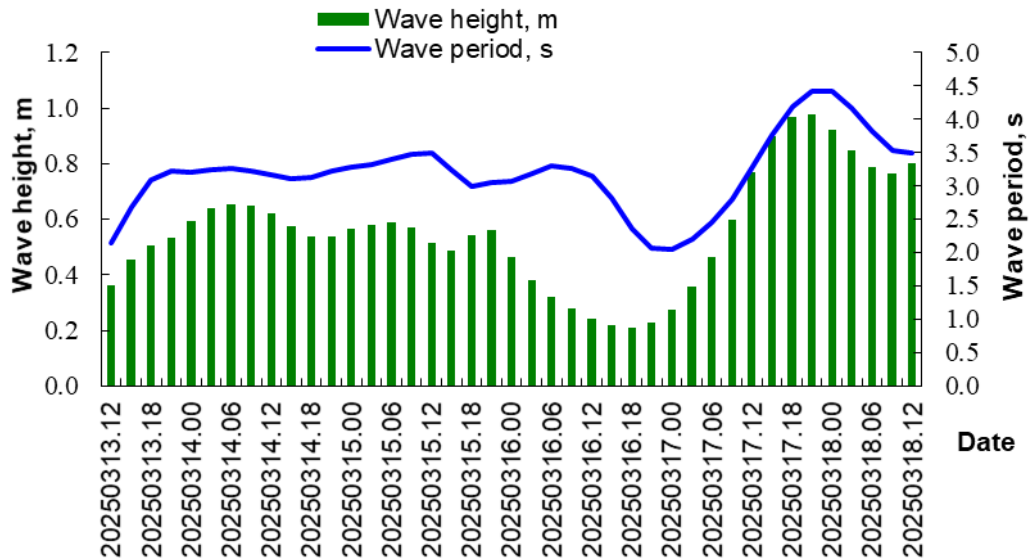


Date time	Peschanyi (Isan)				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.69	SE	2.7	7	NW
20250313.15	0.85	SE	3.2	7	NW
20250313.18	0.91	SE	3.5	6	NW
20250313.21	0.77	SE	3.5	6	NW
20250314.00	0.72	SE	3.3	7	NW
20250314.03	0.79	SE	3.3	8	NW
20250314.06	0.91	SE	3.5	8	NW
20250314.09	0.99	SE	3.7	8	NW
20250314.12	1.03	SE	3.8	9	NW
20250314.15	1.02	SE	3.8	8	NW
20250314.18	0.97	E	3.9	7	NW
20250314.21	0.94	E	3.8	7	W
20250315.00	0.92	E	3.8	7	W
20250315.03	0.85	E	3.7	6	NE
20250315.06	0.74	E	3.6	5	NE
20250315.09	0.66	E	3.4	5	E
20250315.12	0.61	E	3.2	5	S
20250315.15	0.57	NE	3.1	5	SE
20250315.18	0.50	E	3.1	4	E
20250315.21	0.43	E	3.2	3	SE
20250316.00	0.37	E	3.3	1	SE
20250316.03	0.32	SE	3.4	3	NE
20250316.06	0.28	SE	3.3	4	W
20250316.09	0.26	SE	2.8	6	NW
20250316.12	0.31	SE	2.2	7	NW
20250316.15	0.43	SE	2.2	8	NW
20250316.18	0.57	SE	2.5	8	NW
20250316.21	0.75	SE	2.9	9	NW
20250317.00	0.93	SE	3.3	9	NW
20250317.03	1.14	E	3.7	10	NW
20250317.06	1.37	E	4.1	11	NW
20250317.09	1.55	E	4.5	11	NW
20250317.12	1.66	E	4.7	11	W
20250317.15	1.62	E	4.8	9	W
20250317.18	1.47	E	4.9	8	W
20250317.21	1.26	E	4.9	6	W
20250318.00	1.05	E	4.9	4	W
20250318.03	0.88	E	4.7	5	W
20250318.06	0.77	E	4.1	5	W
20250318.09	0.69	E	3.7	5	W
20250318.12	0.67	E	3.5	4	W

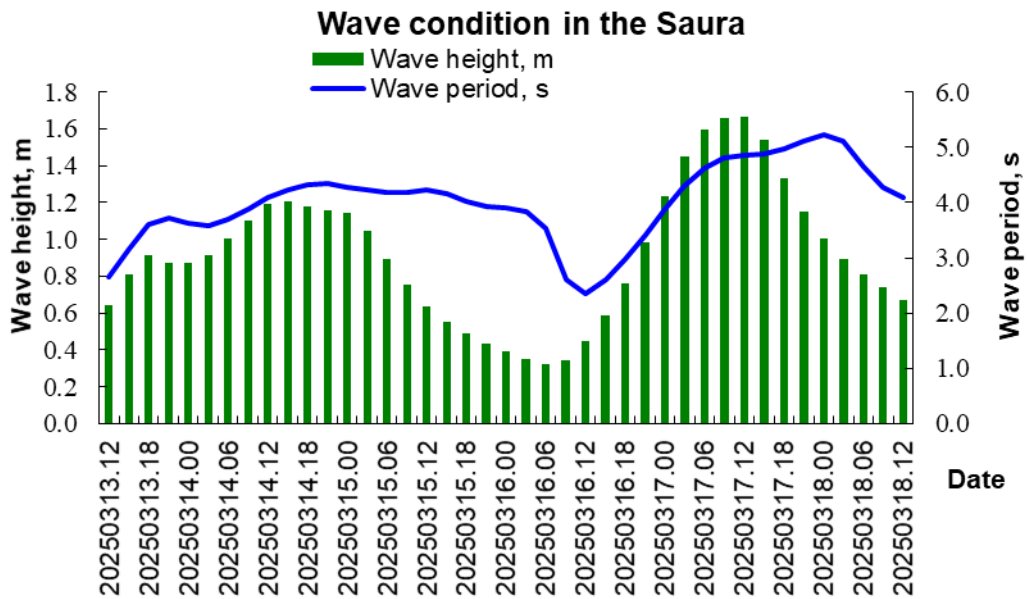
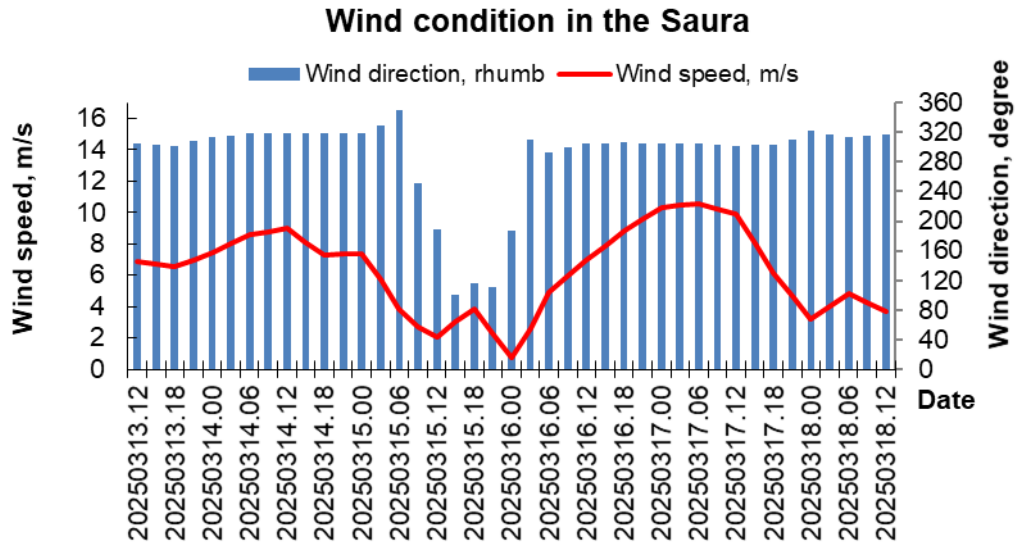
Wind condition in the Fetisovo



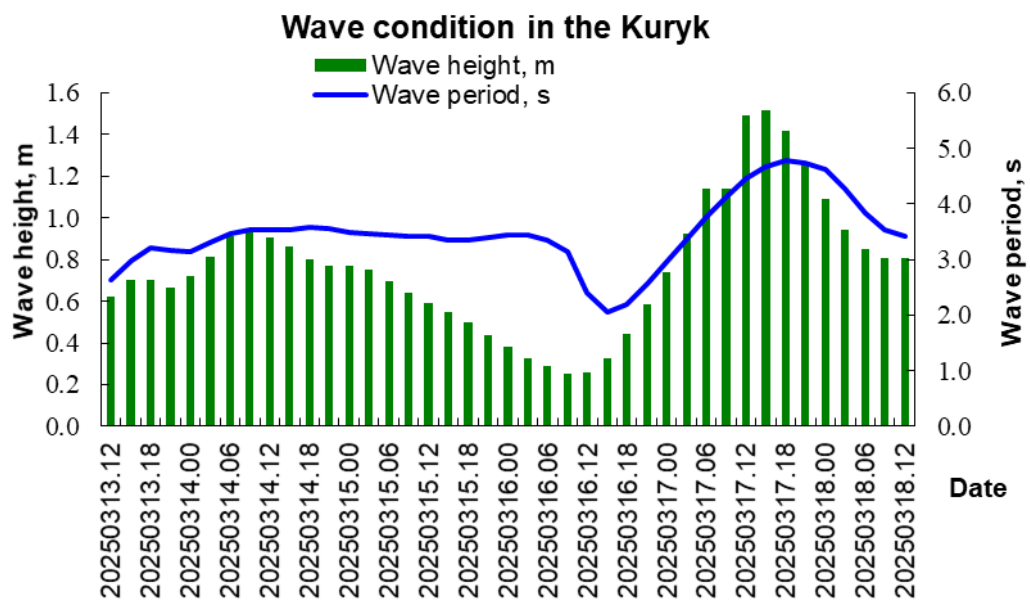
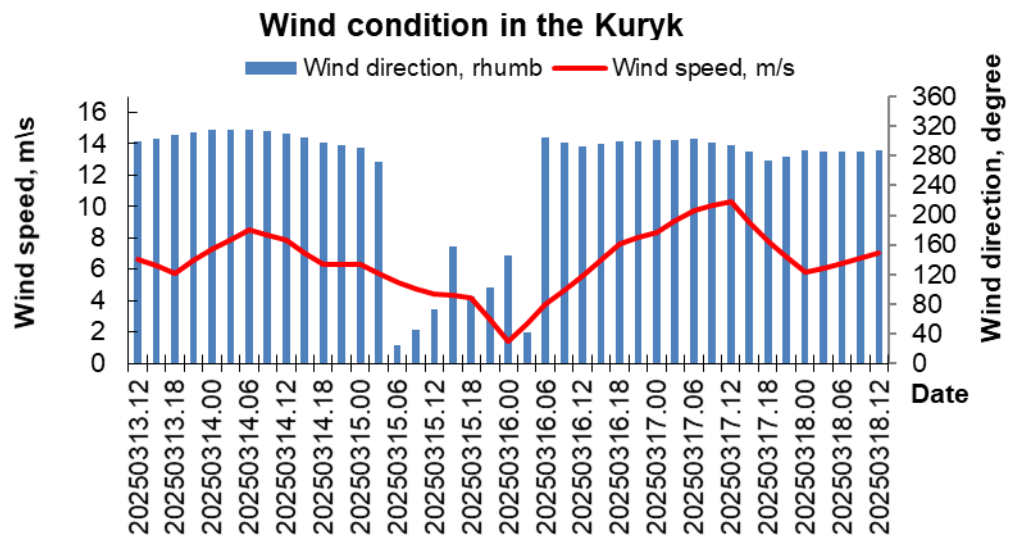
Wave condition in the Fetisovo



Date time	Fetisovo				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.36	SE	2.1	4	NW
20250313.15	0.46	SE	2.7	4	N
20250313.18	0.51	SE	3.1	4	W
20250313.21	0.53	SE	3.2	5	N
20250314.00	0.59	SE	3.2	5	NW
20250314.03	0.64	SE	3.2	6	NW
20250314.06	0.66	SE	3.3	6	N
20250314.09	0.65	SE	3.2	6	NW
20250314.12	0.62	SE	3.2	6	NW
20250314.15	0.58	SE	3.1	5	N
20250314.18	0.54	SE	3.1	4	N
20250314.21	0.54	SE	3.2	4	N
20250315.00	0.56	SE	3.3	5	N
20250315.03	0.58	SE	3.3	4	NW
20250315.06	0.59	SE	3.4	4	NW
20250315.09	0.57	SE	3.5	4	N
20250315.12	0.52	SE	3.5	4	NE
20250315.15	0.49	E	3.2	5	E
20250315.18	0.54	NE	3.0	6	E
20250315.21	0.56	NE	3.0	5	S
20250316.00	0.46	NE	3.1	3	SE
20250316.03	0.38	NE	3.2	2	SE
20250316.06	0.32	NE	3.3	1	W
20250316.09	0.28	NE	3.3	2	NW
20250316.12	0.24	NE	3.2	3	NW
20250316.15	0.22	NE	2.8	4	NW
20250316.18	0.21	NE	2.4	4	NW
20250316.21	0.23	E	2.1	4	NW
20250317.00	0.27	SE	2.1	5	NW
20250317.03	0.36	SE	2.2	5	NW
20250317.06	0.46	SE	2.5	6	NW
20250317.09	0.60	E	2.8	6	NW
20250317.12	0.77	E	3.3	7	NW
20250317.15	0.90	E	3.8	6	NW
20250317.18	0.97	NE	4.2	6	W
20250317.21	0.98	NE	4.4	5	W
20250318.00	0.92	NE	4.4	3	NW
20250318.03	0.85	NE	4.2	4	NW
20250318.06	0.79	E	3.8	6	W
20250318.09	0.76	E	3.5	6	W
20250318.12	0.80	E	3.5	7	N



Date time	Saura				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.65	SE	2.7	7	NW
20250313.15	0.81	SE	3.2	7	NW
20250313.18	0.91	SE	3.6	7	NW
20250313.21	0.87	E	3.7	7	NW
20250314.00	0.87	E	3.6	7	NW
20250314.03	0.92	SE	3.6	8	NW
20250314.06	1.01	SE	3.7	9	NW
20250314.09	1.10	SE	3.9	9	NW
20250314.12	1.19	SE	4.1	9	NW
20250314.15	1.21	SE	4.2	8	NW
20250314.18	1.18	E	4.3	7	NW
20250314.21	1.16	E	4.4	7	NW
20250315.00	1.14	E	4.3	7	NW
20250315.03	1.04	E	4.2	6	NW
20250315.06	0.90	E	4.2	4	N
20250315.09	0.75	E	4.2	3	W
20250315.12	0.64	E	4.2	2	S
20250315.15	0.55	E	4.2	3	E
20250315.18	0.49	SE	4.0	4	SE
20250315.21	0.44	SE	3.9	2	E
20250316.00	0.39	SE	3.9	1	S
20250316.03	0.35	SE	3.8	3	NW
20250316.06	0.32	SE	3.5	5	W
20250316.09	0.35	SE	2.6	6	NW
20250316.12	0.45	SE	2.4	7	NW
20250316.15	0.59	SE	2.6	8	NW
20250316.18	0.76	SE	3.0	9	NW
20250316.21	0.98	SE	3.4	10	NW
20250317.00	1.23	SE	3.9	10	NW
20250317.03	1.45	SE	4.3	10	NW
20250317.06	1.59	E	4.6	11	NW
20250317.09	1.66	E	4.8	10	NW
20250317.12	1.66	E	4.9	10	NW
20250317.15	1.54	E	4.9	8	NW
20250317.18	1.33	E	5.0	6	NW
20250317.21	1.15	E	5.1	5	NW
20250318.00	1.01	E	5.2	3	NW
20250318.03	0.89	E	5.1	4	NW
20250318.06	0.81	E	4.7	5	NW
20250318.09	0.74	E	4.3	4	NW
20250318.12	0.67	E	4.1	4	NW



Date time	Kuryk				
	Wave height, m	Wave direction, rhumb	Wave period, s	Wind speed, m/s	Wind direction, rhumb
20250313.12	0.62	SE	2.6	7	NW
20250313.15	0.70	SE	3.0	6	NW
20250313.18	0.70	SE	3.2	6	NW
20250313.21	0.66	SE	3.2	7	NW
20250314.00	0.72	SE	3.2	7	NW
20250314.03	0.82	SE	3.3	8	NW
20250314.06	0.91	SE	3.5	8	NW
20250314.09	0.93	SE	3.5	8	NW
20250314.12	0.91	SE	3.5	8	NW
20250314.15	0.86	SE	3.5	7	NW
20250314.18	0.80	SE	3.6	6	NW
20250314.21	0.77	E	3.5	6	NW
20250315.00	0.77	E	3.5	6	W
20250315.03	0.75	E	3.5	6	W
20250315.06	0.70	E	3.5	5	NE
20250315.09	0.64	E	3.4	5	NE
20250315.12	0.59	E	3.4	4	E
20250315.15	0.55	E	3.4	4	SE
20250315.18	0.50	E	3.4	4	E
20250315.21	0.44	E	3.4	3	E
20250316.00	0.38	E	3.4	1	SE
20250316.03	0.33	E	3.4	3	NE
20250316.06	0.29	E	3.4	4	NW
20250316.09	0.26	E	3.1	5	NW
20250316.12	0.26	SE	2.4	6	W
20250316.15	0.33	SE	2.1	7	NW
20250316.18	0.44	SE	2.2	8	NW
20250316.21	0.58	SE	2.6	8	NW
20250317.00	0.74	SE	3.0	8	NW
20250317.03	0.93	E	3.4	9	NW
20250317.06	1.14	E	3.8	10	NW
20250317.09	1.14	E	4.1	10	NW
20250317.12	1.49	E	4.5	10	NW
20250317.15	1.52	E	4.7	9	W
20250317.18	1.42	E	4.8	8	W
20250317.21	1.27	E	4.7	7	W
20250318.00	1.09	E	4.6	6	W
20250318.03	0.94	E	4.3	6	W
20250318.06	0.85	E	3.8	6	W
20250318.09	0.81	E	3.5	7	W
20250318.12	0.81	E	3.4	7	W

**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