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

SCIENTIFIC RESEARCH CENTER

CASPIAN SEA WEEKLY BULLETIN 4

January 23, 2026, Friday

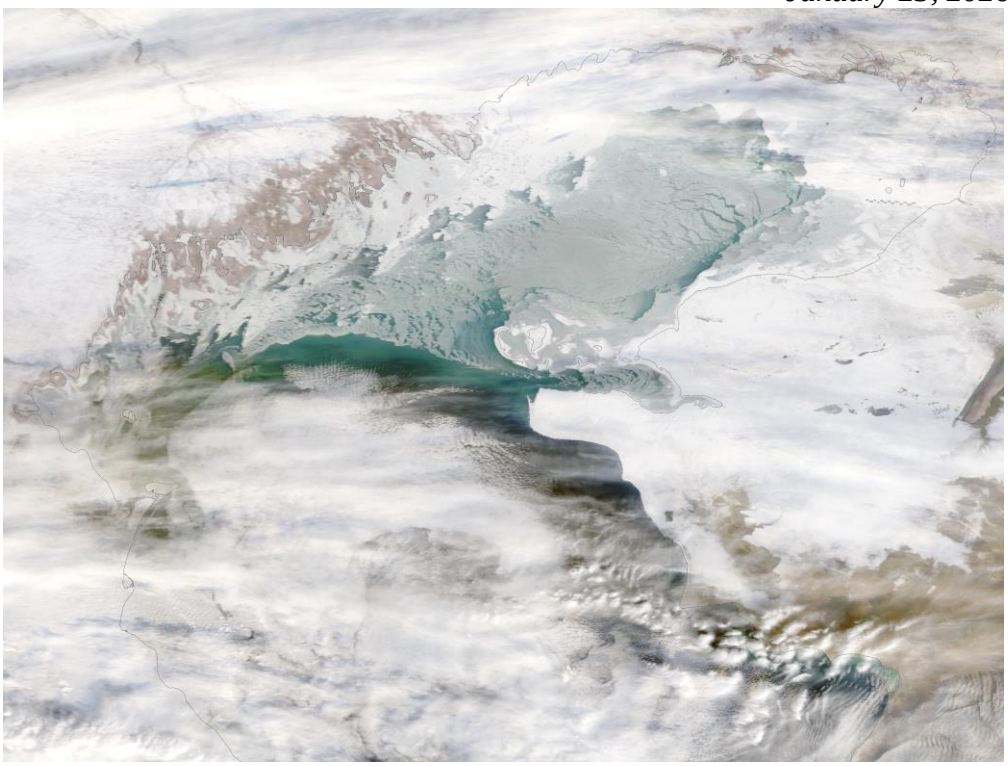

Fig.1 Space image of the Caspian Sea, January 20, 2026 (NASA/GSFC)

FORECAST OF LEVEL AND SURGE PHENOMENA IN THE MIDDLE PART OF THE CASPIAN SEA ON JANUARY 22 – 27, 2026

SEA LEVEL.

In the period on January 22 – 27, the sea level is expected to fluctuate around the mark of minus 29.58 m BS. The range of fluctuations in sea level is from minus 29.10 m to minus 30.02 m.

Figure 2 shows a graph of the predicted sea level values at various points in the Middle part of the Caspian Sea.

SURGERY PHENOMENA.

In the area of Fort Shevchenko, Saura, Peschanyi, Fetisovo, Aktau and Makhachkala, surge events are not expected, sea level fluctuations will not exceed **14 cm**.

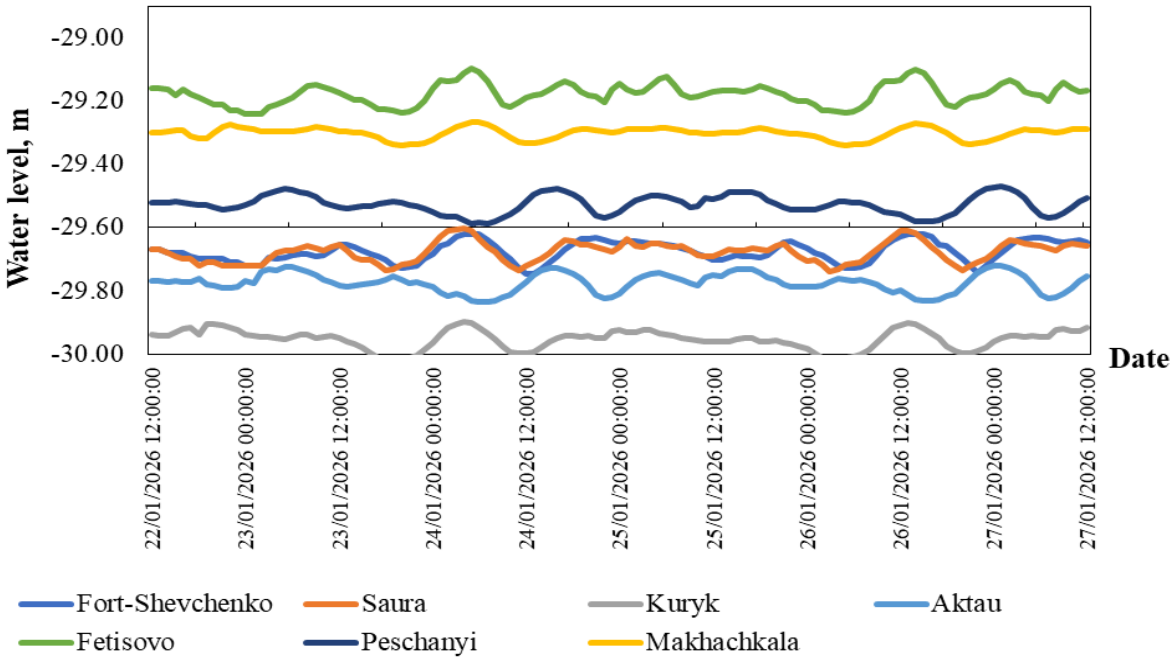

Fig .2 Forecast of sea level in the points of the Middle Caspian

FORECAST VALUES OF SEA LEVEL FLUCTUATIONS AT VARIOUS POINTS OF THE KAZAKHSTANI COAST

Point name	Maximum		Minimum		Average
	Level, sm (m BS)	date, time, GMT*	Level, sm (m BS)	date, time, GMT*	Level, sm (m BS)
Middle Part					
Fort-Shevchenko	**-162 (-29,62)**	26/01/2026 13:00:00	**-175 (-29,75)**	24/01/2026 12:00:00	**-168 (-29,68)**
Saura	**-160 (-29,60)**	24/01/2026 04:00:00	**-174 (-29,74)**	26/01/2026 03:00:00	**-168 (-29,68)**
Kuryk	**-190 (-29,90)**	24/01/2026 04:00:00	**-202 (-30,02)**	23/01/2026 18:00:00	**-195 (-29,95)**
Aktau	**-172 (-29,72)**	27/01/2026 00:00:00	**-184 (-29,84)**	24/01/2026 07:00:00	**-178 (-29,78)**
Fetisovo	**-110 (-29,10)**	24/01/2026 05:00:00	**-124 (-29,24)**	23/01/2026 00:00:00	**-118 (-29,18)**
Peschanyi	**-147 (-29,47)**	27/01/2026 01:00:00	**-159 (-29,59)**	24/01/2026 07:00:00	**-153 (-29,53)**
Makhachkala	**-127 (-29,27)**	24/01/2026 05:00:00	**-134 (-29,34)**	23/01/2026 20:00:00	**-130 (-29,30)**

GMT - Greenwich Mean Time*

REVIEW
CASPIAN SEA WATER STAGE FROM JANUARY 15 – 21, 2026

According to the operational data of the sea stations of Kazhydromet: Fort-Shevchenko, Aktau, Fetisovo, Saura, Peschanyi and Roshydromet (Makhachkala),

the average value of the level of the Caspian Sea, in its deep part, corresponded to minus 29.57 m, the maximum minus 29.06 m, the minimum minus 29.80 m.

REVIEW OF ICE CONDITIONS IN THE CASPIAN SEA, January 15 – 21, 2026

Satellite imagery (Figure 1) and operational data from marine stations and observatories along the northern coast of the Caspian Sea indicate the formation of an ice cover.

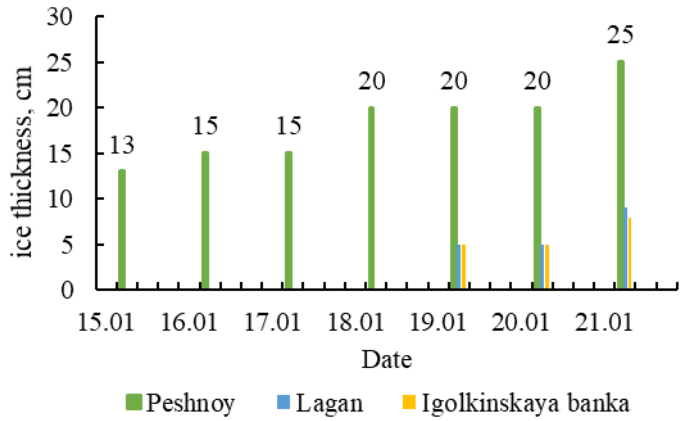

Fig. 3 Ice thickness according to operational data of marine stations

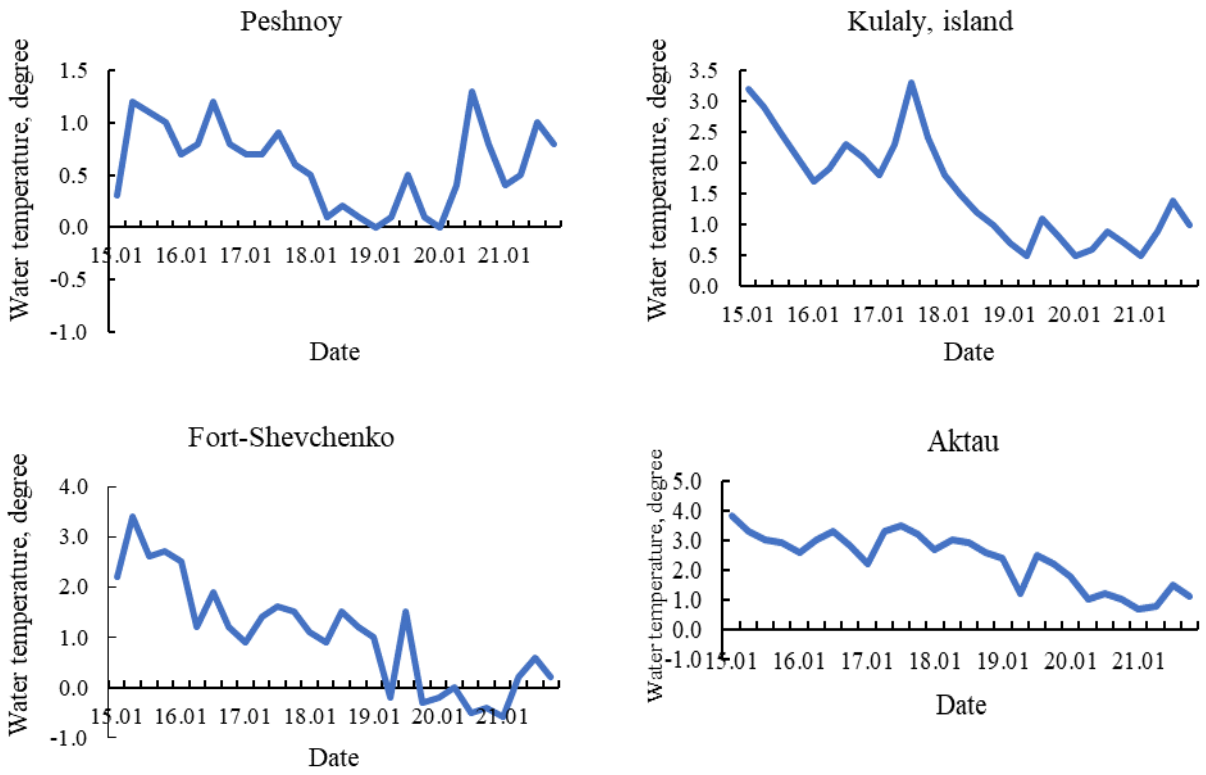

Fig. 4 Water temperature varies according operative data from Caspian Sea stations

CRITERIA OF DANGER OF THE STORM SURGES IN THE NORTHEAST COAST

	Rise/Fall, cm	Characteristic***	Consequences
Up surge	50	Critical	Flooded coast area to 5 km
	65	Danger	Flooding and flooding of dams and buildings up to 10 km
	110	Especially danger	Flooding of the coast for more than 10 km, destruction of dams and buildings
Down surge	-50	Critical	worsening navigation conditions for small ships
	-65	Danger	Worsening of navigation conditions for small and medium-sized ships
	-100	Especially danger	Ships would be aground

** The calculated characteristics were obtained using the hydrodynamic module of the MIKE 21 Flow Model, adapted in RSE "Kazgidromet" to the conditions of the Caspian Sea. Data of sea level measurements and pressure field numerical forecasting for 24 –120 hours were used in computation.*

*** At definition of characteristic marks local conditions were considered.*

**** Critical – 50 % frequency, danger – 25 % frequency, especially danger– 2 % frequency. The calculation was carried out for the period 1940-2020 according to the data of Peshnoy station.*

BS – Baltic System

The bulletin was compiled by the Department of Hydrometeorological Research of the Caspian Sea

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