

*Fig. 3 Water temperature varies according operative data from Caspian Sea stations*

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*When using materials of the bulletin the reference is obligatory on RSE "Kazgidromet"*

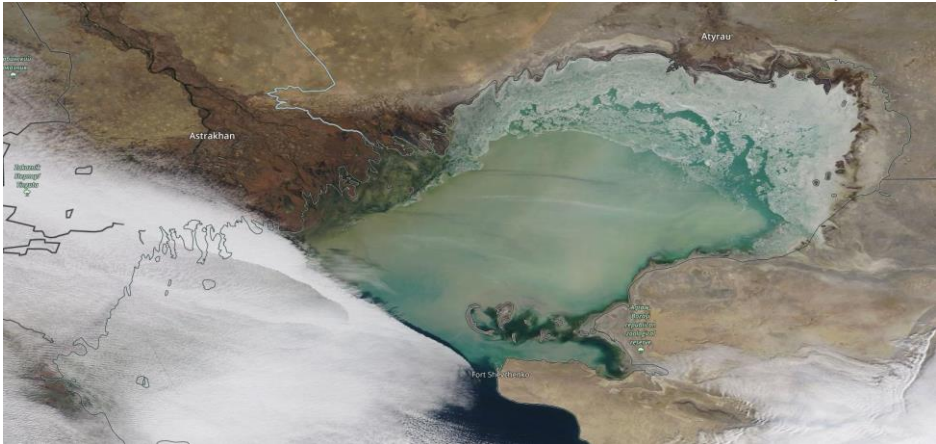


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*Fig 1. Ice conditions on the Caspian Sea, 09, January, 2022.  
Image of the «MODIS Project at NASA Aqua»*

**Review**

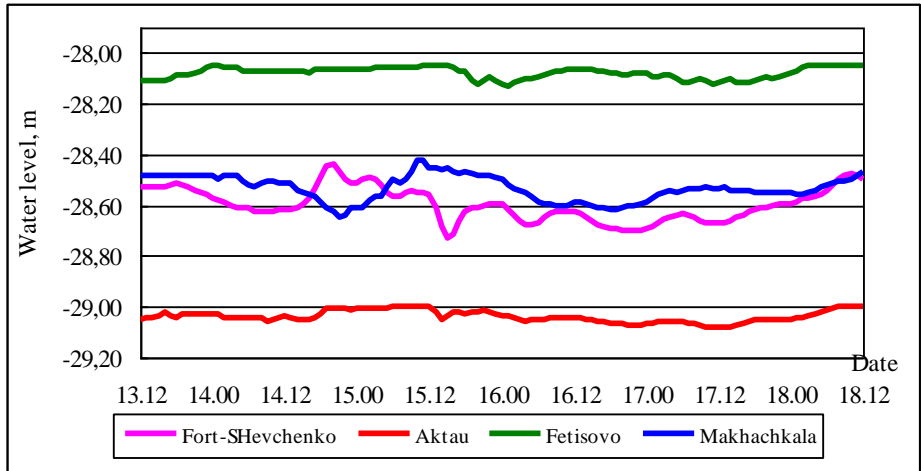
***Caspian Sea water stage from 06-12 January 2022***

The mean sea level was minus 28,42 m on the Caspian Sea shallow part covered by ice.

On the Caspian Sea deep-water part the mean sea level was minus 28,54 m, maximum – minus 28,05 m, minimum – minus 29,05 m.

**Caspian Sea level forecast\* in the area without ice,  
13-18 January, 2022**

The sea-level fluctuation is expected about minus 28,56 m, with maximum rise up to the minus 28,05 m and minimum fall to minus 29,08 m (figure 2).



*Fig.2. Forecasted sea level varies in the different areas of Caspian Sea*

*\* The characteristics were computed by Hydrodynamic module MIKE 21 of Danish Hydraulic Institute. RSE "KAZHYDROMET" has the module adapted to Caspian Sea conditions. Data of sea level measurements and pressure field numerical forecasting for 24 –120 hours from the European Center Middle Weather forecast, Reading, Great Britain were used in computation. The local conditions were considered when determined specific marks.*

*Critical – 50% frequency, dangerous – 25% frequency, extremely dangerous – 2% frequency.*

***Caspian Sea level forecast in different stations,  
13-18 January, 2022***

Station	Maximum sea level		Minimum sea level		Average value, cm (m abs)
	Value, cm (m abs)	Date, time	Value, cm (m abs)	Date, time	
Fort-Shevchenko	<b>-44</b> <b>(-28,44)</b>	2022/01/14 20:00:00	<b>-73</b> <b>(-28,73)</b>	2022/01/15 15:00:00	<b>-60</b> <b>(-28,60)</b>
Aktau	<b>-99</b> <b>(-28,99)</b>	2022/01/15 06:00:00	<b>-108</b> <b>(-29,08)</b>	2022/01/17 10:00:00	<b>-104</b> <b>(-29,04)</b>
Fetisovo	<b>-5</b> <b>(-28,05)</b>	2022/01/14 00:00:00	<b>-13</b> <b>(-28,13)</b>	2022/01/16 00:00:00	<b>-8</b> <b>(-28,08)</b>
Makhachkala	<b>-42</b> <b>(-28,42)</b>	2022/01/15 10:00:00	<b>-65</b> <b>(-28,65)</b>	2022/01/14 21:00:00	<b>-53</b> <b>(-28,53)</b>

***Review of ice conditions in the Caspian Sea,  
06-12 January, 2022***

*According to satellite images (Figure 1) and operational data of sea stations and posts along the northern coast of the Caspian Sea, complete freezing occurred.*

