

# COORDINATION COMMITTEE ON HYDROMETEOROLOGY OF THE CASPIAN SEA (CASPCOM)

## Information bulletin on the state of the Caspian Sea level No. 25 17 May 2023

*The Bulletin on the state of the Caspian Sea level is issued twice a year in accordance with the recommendations of CASPCOM and is a joint product of hydrometeorological services of the five Caspian littoral states.*

According to the data received from the National Hydrometeorological Organizations of the Caspian littoral states, the mean level of the Caspian Sea decreased by about 27 cm in 2022 compared with 2021 (-28.43 m abs.) and amounted to -28.70 m abs.<sup>1</sup> (Fig. 1). Thus, in 2022, the fall of the sea level speeded up as contrasted to 2021, when it fell by an average of 20 cm. The main reason for this acceleration was the low flow of the Volga River in 2022 (212 cubic km at the top of the delta), which was significantly lower than the normal one (238 cubic km) and similar to the volume of runoff in 2021 (208 cubic km).

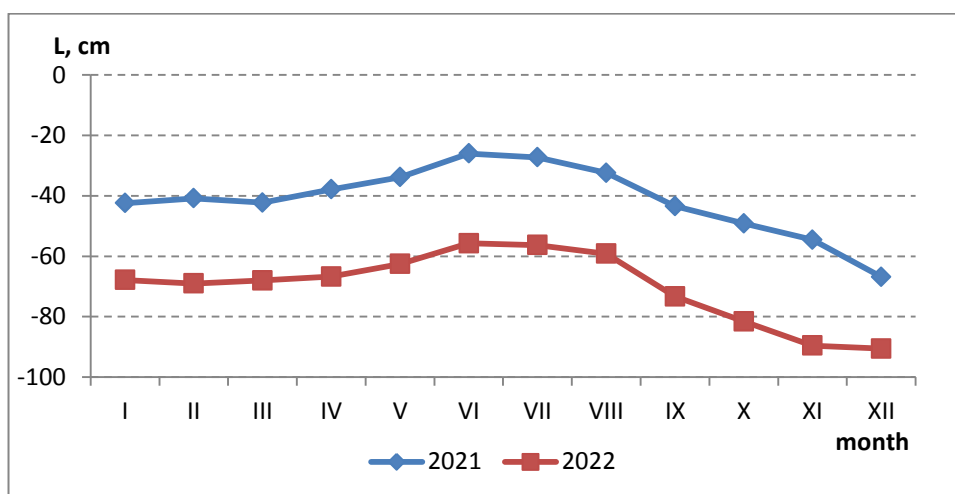


Fig. 1 Seasonal run of the mean Caspian Sea level in 2022 compared to 2021

In January 2022, the mean sea level was about 30 centimeters lower than in January 2021 (Fig. 2).

For the first quarter of 2023, the Volga River runoff was similar to that of the same period in 2022 and 2021 (Fig. 3). Spring flood season started earlier this year compared to the previous one. The peak of the flood was observed in the late April, so that the Volga runoff in April was almost 2.5 times higher than its runoff in 2022. However higher

<sup>1</sup> To calculate the mean value of the sea level for the whole sea we have used observations data at the "century" posts: Baku, Neft Dashlary (Oil Rocks), Makhachkala, Fort-Shevchenko, Guvlymayak (Kuuli-Mayak), Turkmenbashi (Krasnovodsk), Garabogaz (Kara-Bogaz-Gol).

water discharge have been observed only for 5 days due to the low water intake in the Volga basin. The discharge goes down from 25 April on. Therefore, 2023 has all chances to be the third low water year in the line.

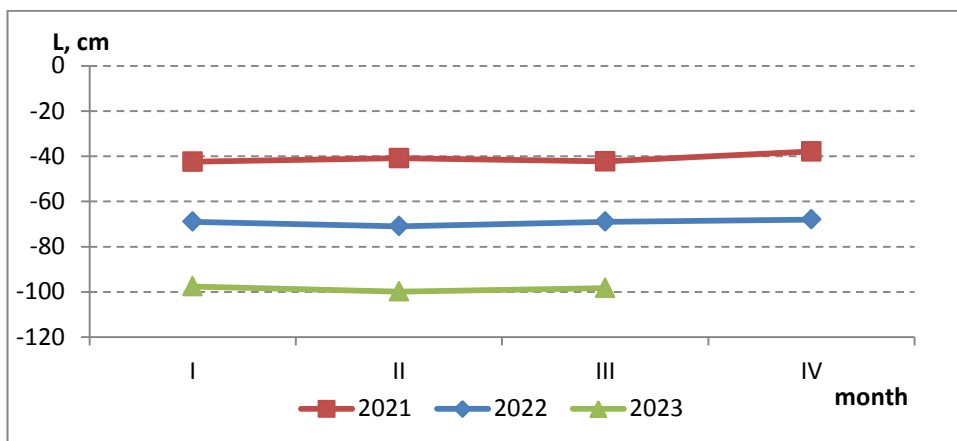


Fig. 2 Seasonal run of the mean Caspian Sea level in early 2023 compared to early 2022 and 2021

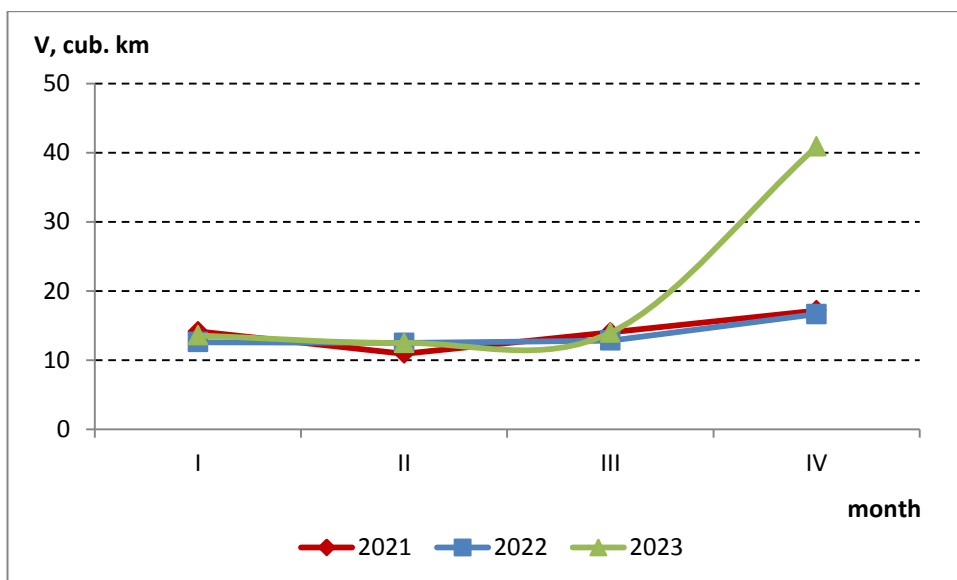


Fig. 3 Monthly discharge of the Volga River in early 2023 compared to early 2022 and 2021

It is expected that the mean annual level of the Caspian Sea continues falling down due to the projected low water flow of the Volga River in 2023.

*This bulletin is intended for the authorities, enterprises, organizations and coastal communities as well as for all whose activities are connected with the Caspian Sea. Its preparation became possible only due to the cooperation of hydrometeorological organizations of the Caspian littoral states. The data of the General Catalogue of the Caspian Sea level elaborated under CASPCOM umbrella were used to compile the bulletin*