

COORDINATION COMMITTEE ON HYDROMETEOROLOGY OF THE CASPIAN SEA (CASPCOM)

Information bulletin on the state of the Caspian Sea level No. 23 13 May 2022

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 20 cm in 2021 compared with 2020 (-28.23 m abs.) and amounted to -28.43 m abs.¹ (Fig. 1). Thus, in 2021, the fall of the sea level speeded up as contrasted to 2019, when it fell by an average of 3 cm per year. The main reason for this acceleration was the decreased flow of the Volga River in 2021 (208 cubic km at the top of the delta), which was significantly lower than the normal one (238 cubic km) and the volume of runoff in 2020 (279 cubic km), though it did not reach the minimum observed in 2019 (205 cubic km).

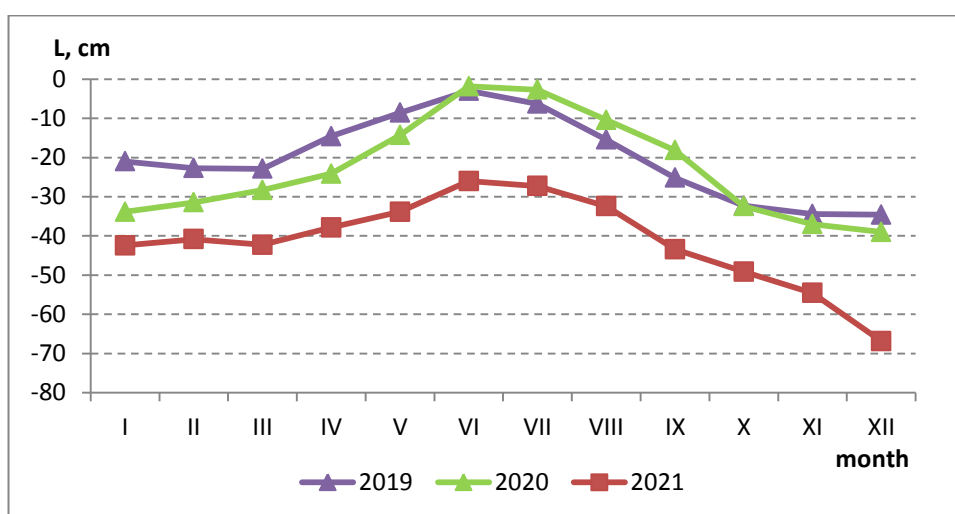


Fig. 1 Seasonal run of the mean Caspian Sea level in 2021 compared to 2020 and 2019

In December 2021, the mean sea level was about 28 centimeters lower than in December 2020 (Fig. 2).

For the first quarter of 2022, the Volga River runoff was similar to that of the same period in 2020 and significantly lower than the runoff observed in the first four months in 2019 (Fig. 3).

¹ 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).

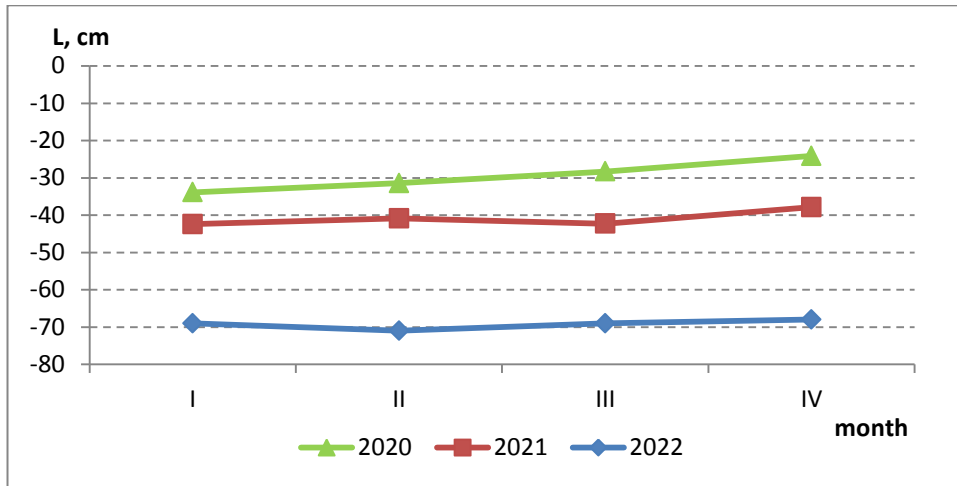


Fig. 2 Seasonal run of the mean Caspian Sea level in early 2022 compared to early 2021 and 2020

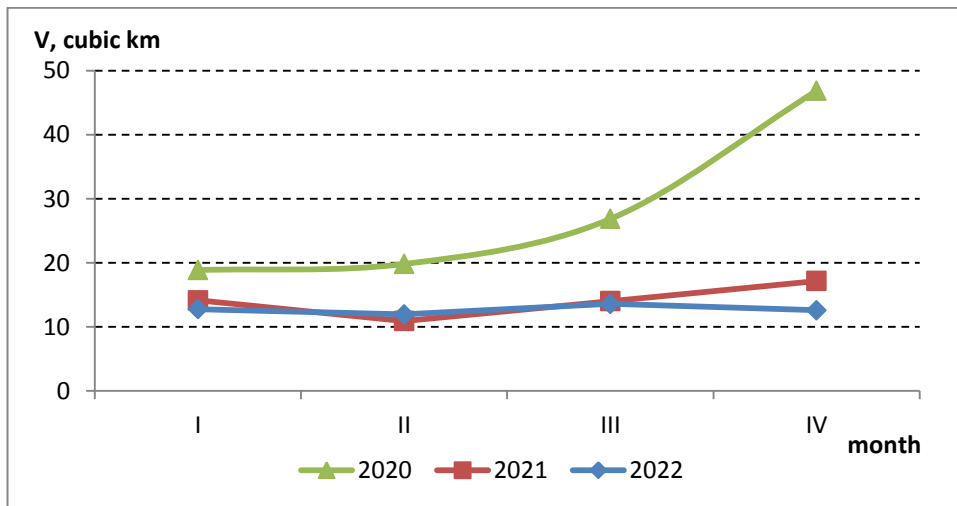


Fig. 3 Monthly discharge of the Volga River in early 2022 compared to early 2021 and 2020

According to the bulletin No. 36 published by the Hydrometeorological Center of Russia on April 28, 2022, it is expected that due to the projected low water flow of the Volga River in 2022, the mean annual level of the Caspian Sea goes 20-23 cm lower than in the previous year.

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