COORDINATION COMMITTEE
ON HYDROMETEOROLOGY OF THE CASPIAN SEA (CASPCOM)

Information bulletin on the state of the Caspian Sea level
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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.

The Caspian Sea level at its seasonal peak in June 2022 was 26 cm below the level of June of the previous year (-28.82 and -28.56 m abs[1]. respectively). The rate of its seasonal rise due to spring flooding of the Volga River and further run was rather similar to that in the same period of the previous year (Fig. 1).

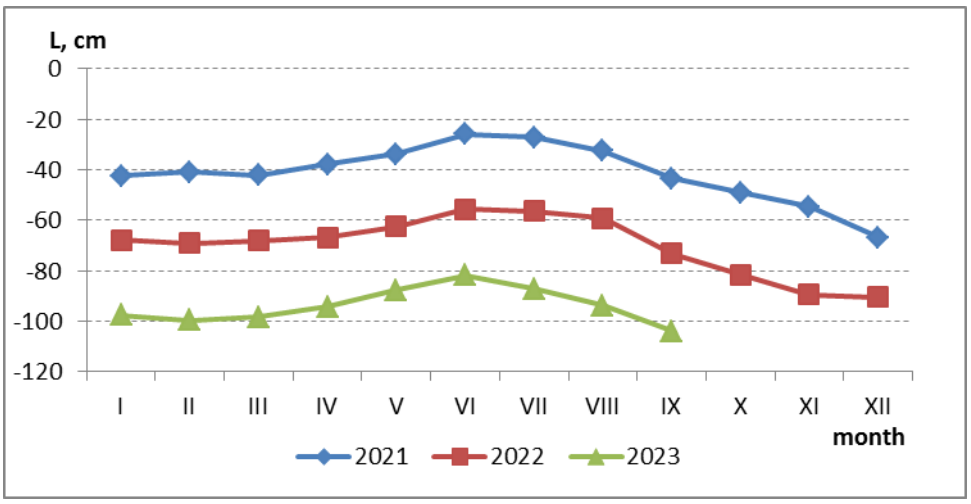

Fig. 1 Seasonal run of the mean Caspian Sea level in 2023 as compared to 2021 and 2022

The main reason for such a decrease in the sea level was the low runoff of the Volga River observed in three years in the row (in 2021, 2022 and 2023). The water runoff of the Volga for 9 months of this year amounted to only 172 cub. km, which is at the same level as the value for the same period in 2022 (173 cub. km). The characteristics of the spring flooding period in the current year (duration, starting date and water runoff) differed from those in the previous year (Fig. 2). The flooding of this year was longer in time but with lesser water discharge at its peak. The flooding started and ended a month earlier than in 2022, and the period of its maximal discharge was observed between April and May, that is a month

[1] To calculate the mean value of the sea level for the entire water area, we used data from observations at "century" posts: Baku, Makhachkala, Fort Shevchenko, Guvlymayak (Kuuli-mayak), Turkmenbashi (Krasnovodsk), Duzlybogaz (Kara-Bogaz-Gol)

earlier than normally. This was caused by the warmer weather and earlier ice melting in the Volga Basin in the spring of 2023.

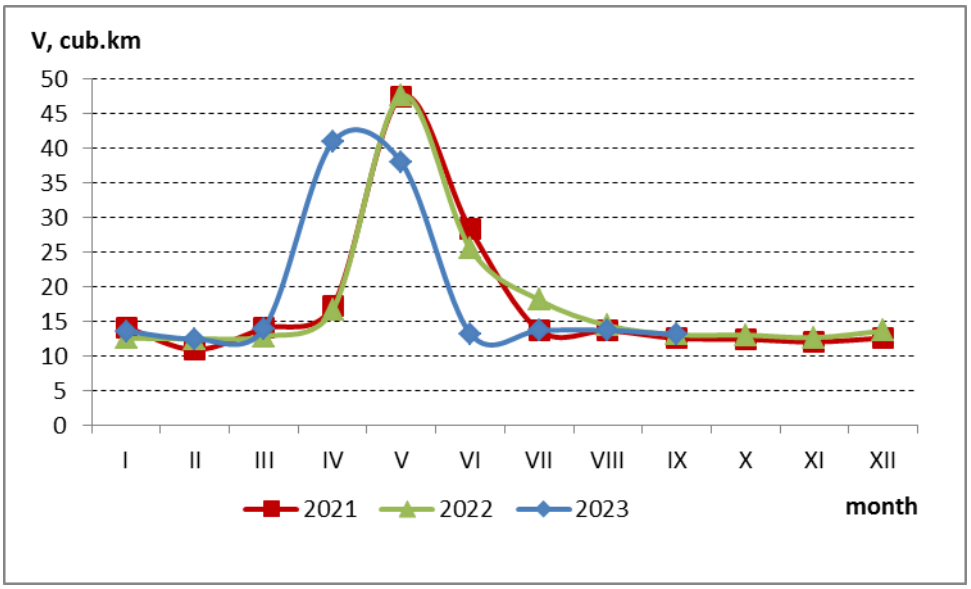

Fig. 2 Mean monthly runoff of the Volga River in 2021-2023

The continued decreasing trend in the Caspian Sea level variations over the last two years can be seen at Figure 3 (satellite data from CMEMS (Copernicus Marine Environment Monitoring Service) were used). Figure 3 also shows that the mean value in 2023 is about 25 cm lower than in 2022.

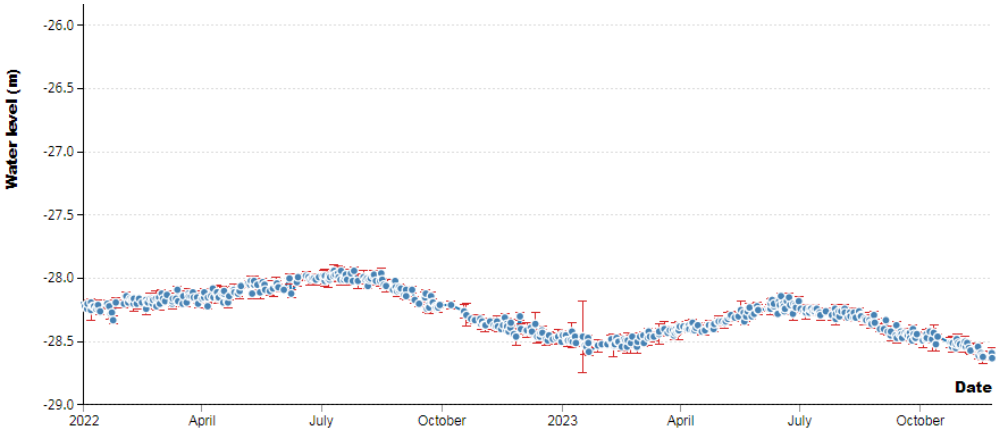

Fig. 3 Caspian Sea Level in 2022 and 2023 (CMEMS data)

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 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