

COORDINATING COMMITTEE ON HYDROMETEOROLOGY OF THE CASPIAN SEA (CASPCOM)

Information bulletin on the state of the Caspian Sea level No.20 30 October 2020

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 in 2019 decreased by about 17 cm as compared to 2018 (-28.03 m abs.) and amounted to -28.20 m abs.¹. At the same time, the decrease in the level at certain posts reached: Baku – 18 cm, Fort Shevchenko – 19 cm, Turkmenbashi – 19 cm (Fig. 1).

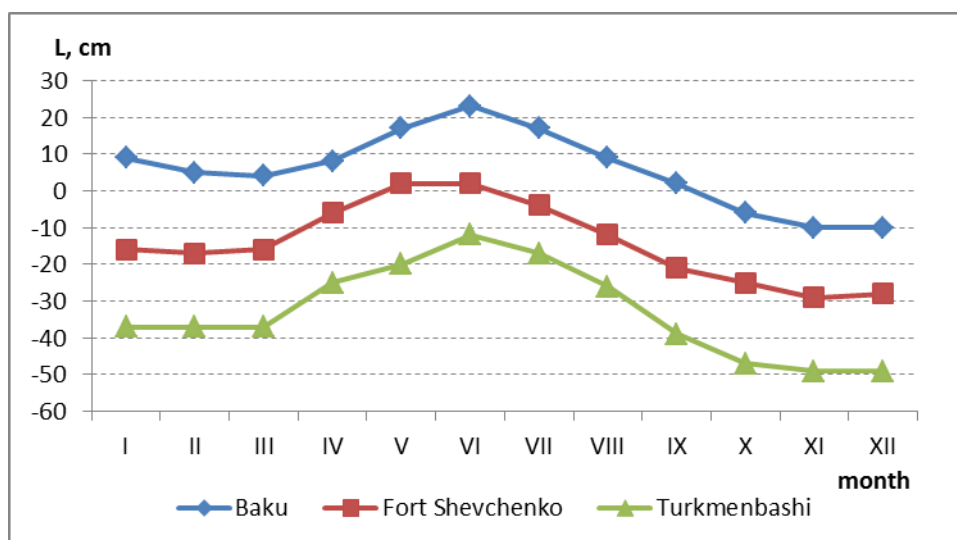


Fig. 1 Seasonal run of the mean Caspian Sea level in 2019

The annual flow of the Volga River in 2019 was 205 km³, which was significantly lower than the long-term average (238 km³). The spring flooding period was significantly shorter, and the water discharge was smaller than in the previous years. In contrast to 2019, the Volga runoff for 9 months of 2020 has already reached 225 km³ and is close to the value of the high-water year of 2018 (Fig. 2). The flood in the spring of 2020 was prolonged, and the volume of water discharge was higher than normal. This was due to the significant precipitation amount that fell in the spring period on the territory of the Volga River basin. Due to the increased water content of the basin's rivers, the mean level of the Caspian Sea in 2020 is likely to remain at the mark of the previous year \pm 2-3 cm.

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, Turkmenbashi (Krasnovodsk).

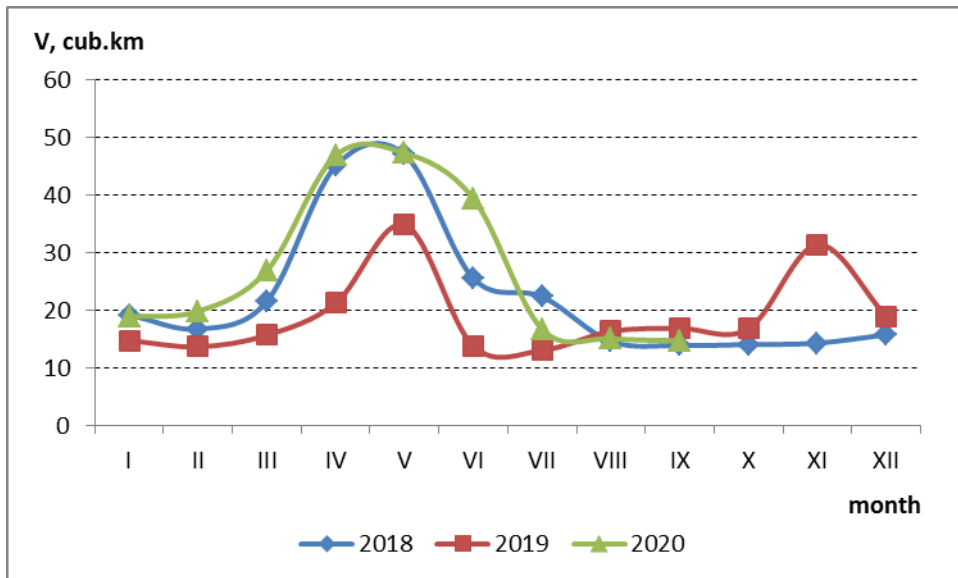


Fig. 2 Mean monthly discharge of the Volga River in 2018-2020

The trend of the Caspian Sea level variations over the past two years can be seen at Figure 3 (satellite data from CMEMS (Copernicus Marine Environment Monitoring Service) was used). Figure 3 also shows that the mean values in 2019 and 2020 are rather similar.

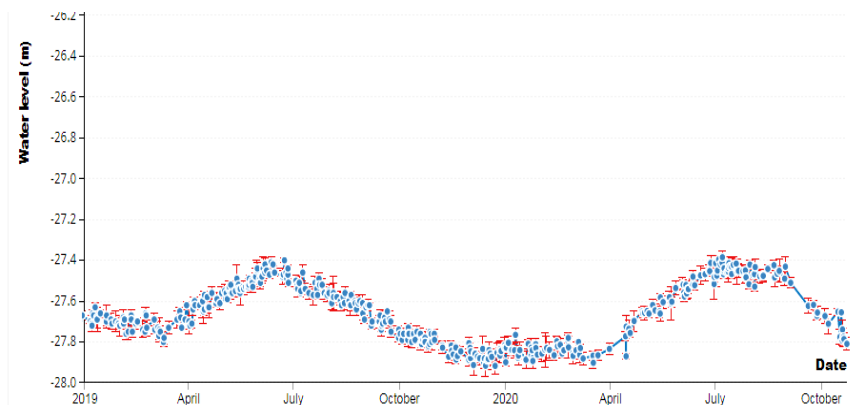


Fig. 3 Caspian Sea Level in 2019 and 2020

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