

**COORDINATING COMMITTEE
ON HYDROMETEOROLOGY AND POLLUTION MONITORING
OF THE CASPIAN SEA (CASPCOM)**

**Information bulletin on the state of the Caspian Sea level
No.5
25 March 2013**

The 17th Session of Coordinating Committee on Hydrometeorology and Pollution Monitoring of the Caspian Sea (CASPCOM) which was held in Astana, the Republic of Kazakhstan, on 16-17 October 2012, took a decision to continue issuing of the "Bulletins on the state of the Caspian Sea" twice a year.

According to the data presented in the General Catalogue of the Caspian Sea level displayed at CASPCOM website, the Caspian Sea level was rising at the beginning of the current century and then it started falling. Level fall rates were increasing from year to year: in 2010 the level fell by 9 cm and in 2011 - by 25 cm. According to the forecast of Hydrometeorological Centre of Russia, the trend of sea level fall was to continue in 2012. The fall of the sea level was expected to make 10-15 cm. Our forecast published in the previous CASPCOM bulletin provided an estimate of 13 cm.

The main reason for the decrease of the sea level was supposed to be the low water content in the Volga river as in the previous two years. Actually the Volga runoff throughout the flooding period and in 2012 as a whole was below normal, though higher than in the previous two years (Fig. 1). Increased water discharges were registered in July as well. Water discharge to the lower reaches of the Volga increased in late autumn as a result of the massive water flow to the Volga - Kama system of reservoirs. As a result, the discharge of the Volga at the delta top reached an unprecedented value of 25 km³.

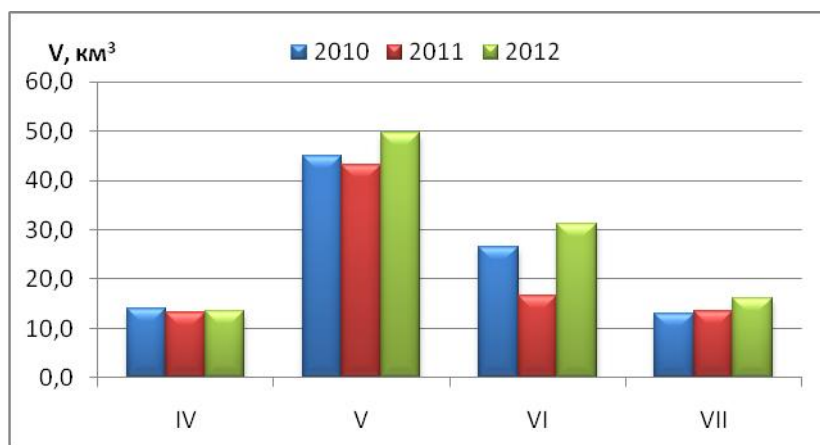


Fig. 1. Water discharges from the Volga delta top (V, km^3) throughout April - June 2010 - 2012.

In connection with these circumstances, the rate of seasonal sea level fall in the second half of 2012 was less than in the previous two years (Fig.2). In the second half of 2010 the sea level fell at the rate of 6 cm a month, in 2011 - 5 cm a month and in 2012 - 4 cm a month.

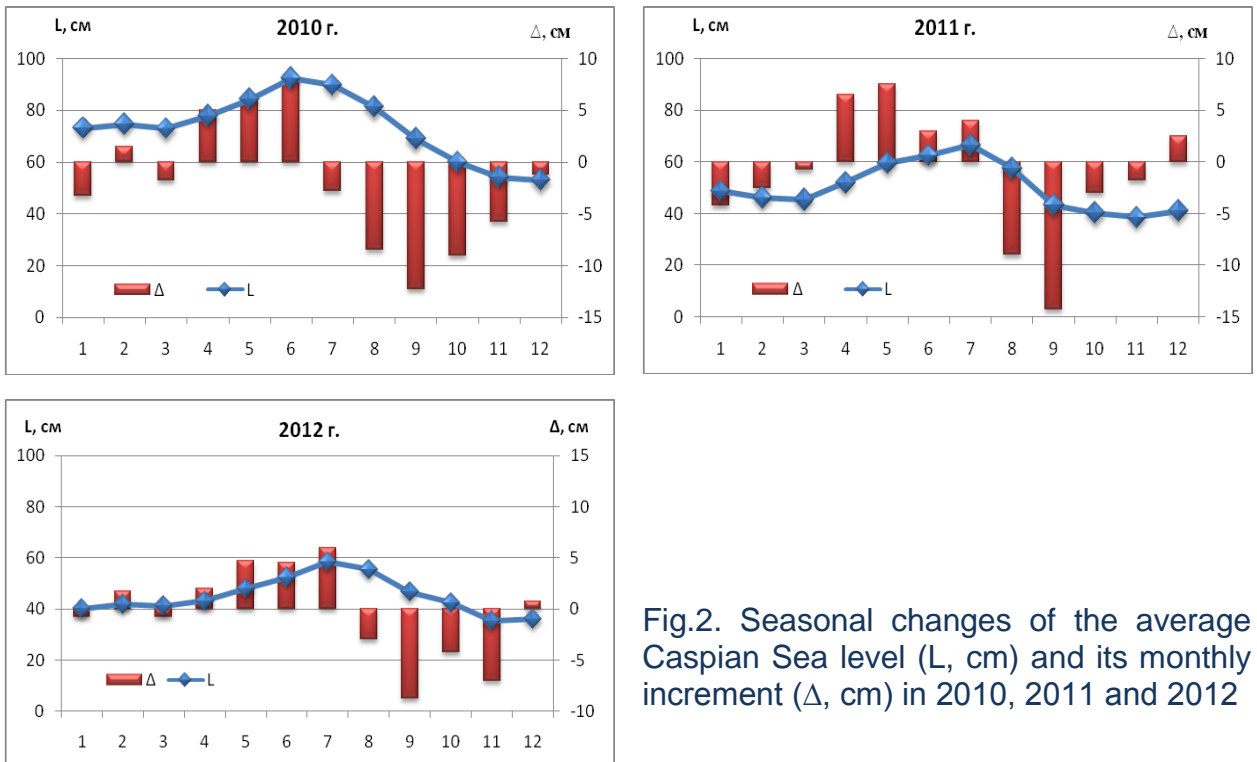


Fig.2. Seasonal changes of the average Caspian Sea level (L, cm) and its monthly increment (Δ, cm) in 2010, 2011 and 2012

In accordance with the data received from the national hydrometeorological organizations of the Caspian littoral states obtained as a result of observations at 25 stations located along the whole sea coastline, the rate of seasonal level decrease in the second half of 2012 ranged from 1 to 8 cm. According to mean absolute value (4 cm a month) it was only by 1 cm higher than the average rate of the seasonal sea level increase in the first half of 2012 (3 cm a month). As a result the average annual sea level in 2012 ¹ fell only by 5 cm against the previous year and made -27.55 m B.S.

In December 2012 the average Caspian Sea level amounted to -27.64 m B.S. According to the data of long-term observations presented in the General Catalogue of the Caspian Sea level, the rate of seasonal rise of the sea level throughout January - June is more stable as compared to the rate of its seasonal fall from July to December. The rate of seasonal rise of the sea level usually ranges from 2 to 4 cm a month. Consequently we can suppose that the average level of the Caspian Sea in June 2013 will be in the range of absolute marks of -27.40 and -27.50 m B.S.

This bulletin is intended for the authorities, enterprises and 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

¹ To calculate the mean level in this case we have used observations data at 4 "century" posts: Baku, Neft Dashlary (Oil Rocks), Makhachkala, Fort-Shevchenko, Turkmenbashi (Krasnovodsk).