

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

**Information bulletin on the state of the Caspian Sea level
No.9
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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 CASPCOM bulletin published a year ago indicated that two periods can be singled out in the Caspian Sea level fluctuation within the recent decades: 1) sharp rise - 1978-1995; 2) gradual fall - 1996-2014. In addition, it could be noted that starting from 2006 the sea level increment has been negative, and the rate of sea level fall has gone up (Fig. 1).

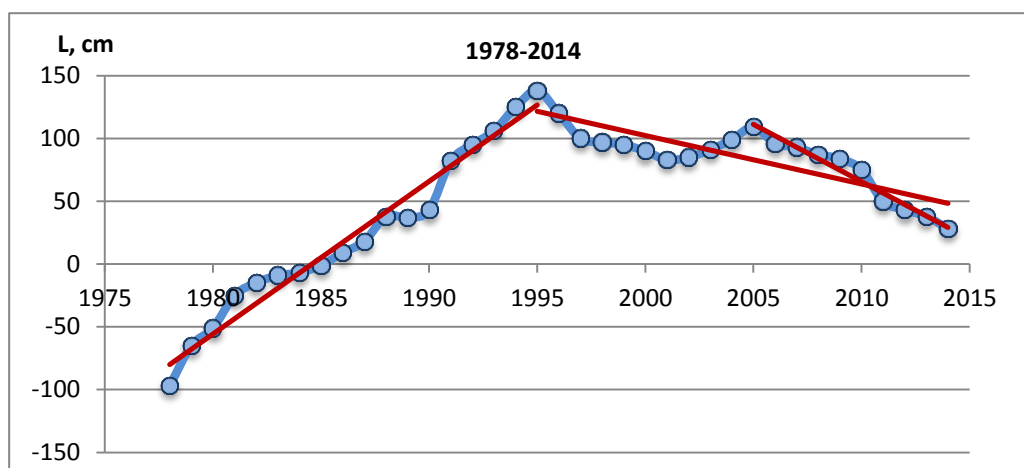


Fig.1 Changes of average Caspian Sea level in 1978 - 2014 and approximating linear trends given for three periods: 1978-1995; 1995-2014; 2005-2014

In accordance with the forecast of Hydrometeorological Centre of Russia published last spring, the sea level fall in 2014 was expected at 5-10 cm. CASPCOM Bulletin No.8 published in autumn stated that the rate of sea level fall in the second half of the year could not be lower than 4-5 cm a month. As a result, the average annual sea level in 2014 was to fall by 8 - 14 cm as compared to 2013. The forecast was based on the data about the low water content in the Volga River in 2014, which was lower than the average for the past 30 years (by about 25 cubic km) and lower than in 2013 (approximately by 50 cubic km).

In fact, the data received by all the hydrometeorological organizations - CASPCOM members revealed that the rate of sea level fall in the second half of 2014 was rather rapid and made 5-10 cm per month. The average Caspian Sea level estimated by the data at 4 posts¹ fell at the rate of 8 cm a month. According to the data of observations

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

received at these posts, the average annual level of the Caspian Sea in 2014 made 31 cm (-27.69 m BS), down 10 cm against 2013.

Fig. 2 clearly shows that in contrast to the three previous years and as a result of the rapid rate of sea level fall, the sea level in 2014 fell by 20 cm below the initial values.

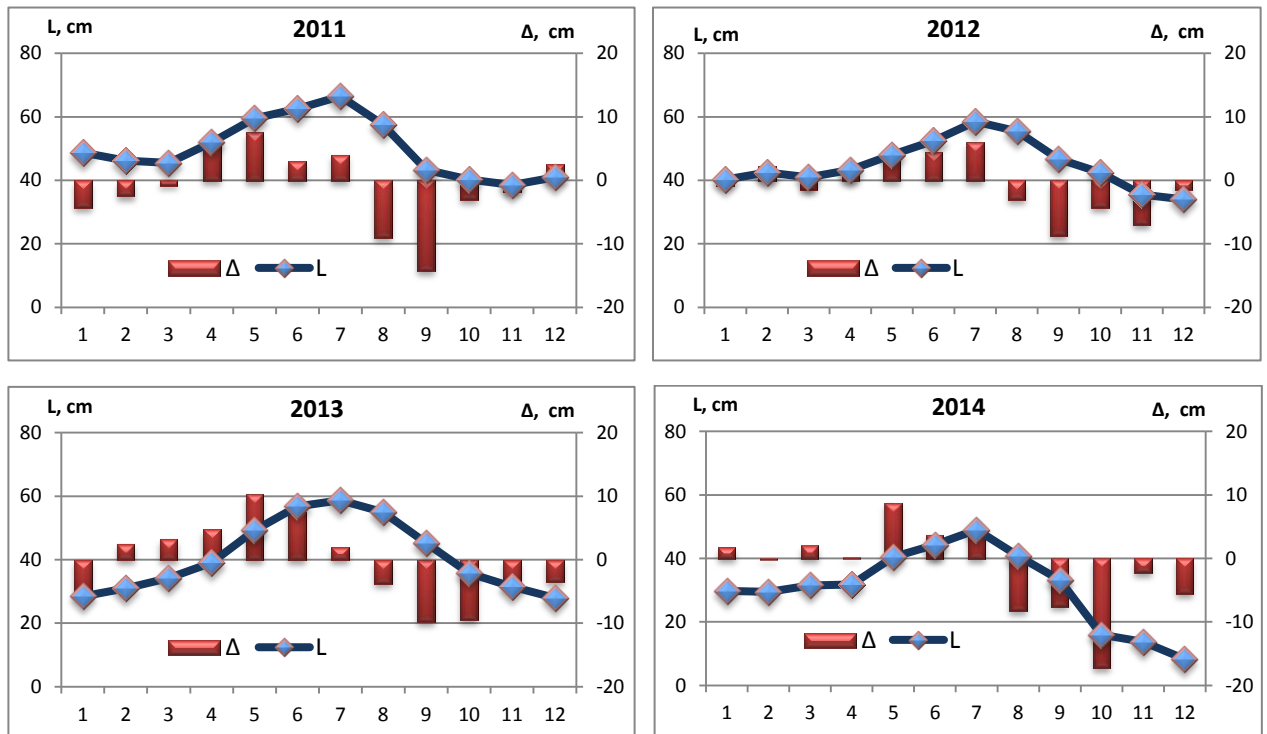


Fig.2. Seasonal changes of the average Caspian Sea level (L, cm) and its monthly increment (Δ, cm) in 2011, 2012, 2013 and 2014

According to the data of long-term observations presented in the General Catalogue of the Caspian Sea level displayed at CASPCOM website, 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 the 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-July 2015 will be in the range of absolute marks from -27.50 to -27.60 m B.S. As a result of the fact that the seasonal rise starts at a very low mark, we can suppose that the average annual level in 2015 will be lower than in 2014 irrespective of the water balance.

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