Kara sea (KS) is conditioned by the huge warm and fresh river waters from the continent, the warm and saline Barents Sea inflow in the West and dense and cold waters of the Arctic Ocean in the North. Here is the demonstration through the analysis of 2007-2008 observational data the contrary tendency of southern KS waters to warmth and northern KS waters to freshen. The data used in this study were collected from the scientific vessel Ivan Petrov CTD survey over the shelf seas of the Euroasian Arctic regions for two consecutive years: 2007 and 2008. The data shows that in 2008 the waters of Bajdaratsky bay mouth has been found warmer (2-4 °C), fresher (1.5-4 psu) and much worse ventilated (1.6 ml/l of dissolved oxygen, or 20% of saturation) comparing with 2007. Moreover, it is observed a warm waters inflow (25-100 m depth) in all central KS. In the northern part a big amount of dissolved oxygen concentration (9 ml/l to 25 m) and absence of the biogens (0.22 μmol/l of phosphates and 0.5 μmol/l of silicates).

I hypothesize the strong warming of central and southern part of the KS due to anomaly big river runoff in 2008, the turbidity in the Gulf of Ob end the Yenisei gulf reached great values (from 0.4 mg/dm3 in 2007 to 2.0 mg/dm3 in 2008). However, the KS was less ice covered in 2008 than in 2007 and more intensive interaction with Arctic Ocean waters allows to freshening the northern surface waters.