TRANSFORMATION OF PHYTOPLANKTON SEASONAL SUCCESSION: CLIMATE CHANGE OR EUTROPHICATION OF THE RESERVOIR?

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Hydrobiological data from water intake station and climate data sets for the period from 1984 to 2015 were divided into three ten-year subperiods – stages, whereby the statistically significant monthly mean characteristics for each decade were calculated.
The main results

Figure 1. Stages of some dominant algae species seasonal vegetation. Abundance of diatom *Asterionella formosa*, green algae *Monoraphidium contortum*, blue-greens *Microcystis aeruginosa* and *Planktothrix agardhii* during winter and spring of the last stage has increased. Is this the result of excess of nutrients in cold period or climate change?
The main results

Figure 2. Changes of air and water temperature of the last two decades in relation to the first one (1984-1994). The value of z-score more than 1.0 indicated a reliable increase of water (air) temperature in May (April–May) of last decade (2005–2015). Therefore, the significant spring warming and the overall extension of the vegetation season is likely responsible for observed Monoraphidium contorum and blue greens spring growth.