

Dynamics of temperature changes on black sea coast line in the background of climate change

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The studies conducted on Georgian territory (II and III national report 2009, 2016 years) has revealed sensitive regions to climate change, where coastline of black sea coast line represents one of the most vulnerable ecosystems that requires immediate actions for adaptation.

The climate change is mostly caused by changes in climate parameters, most importantly changes in air temperature. The study is based on statistical, meteorological and graphical analysis of meteorological data from Batumi and Poti. Based on meteorological observation on multi-year data the dynamics of temperature (1930-2010 years) in different climate conditions and seasons was analyzed and revealed drastic temperature change tendencies. Main results of the study: in 80 year period (1930-2010 years) with straight-line approximation trend temperature was increased with 0.7 °C. Maximums temperature was increased with 3.29 °C and minimum temperature was increased with 0.1 °C. Temperature increase was detected in every season. The sharpest increase was detected in spring season with 0.97°C.

Black sea coast represents region with sub-tropic climate and diverse recreational resources and ecosystem which has greatest potential for development of tourism and economy and because of this it is crucial to evaluate influence of climate changes on this region.