

## Dynamics of meteorological parameters on the Black sea coast in background of climate change

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Climate change is especially noticeable from 70s of 20th century, when the tendency of changing average annual temperature and climatic disasters grew up. It is already scientifically verified that climate change across the entire planet expressed with extreme situations and intensity of precipitation, which are related to increasing average annual temperature.

The sea shores of the world are very sensitive with climate changes and neither the Black Sea is an exception, where the sea level increased (2-3 mm/y) The storm season and intensity of it has changed, also changed temperature of sea surface and shores are washed more frequently than in the past.

For research it is used statistical, climatic, graphical analysis of meteorological data for black sea shore (Batumi, Poti). According to meteorological observation data it is assessed and analyzed last and previous change of climatic period of air temperature, relative synod, rainfall, wind mode, average and multi-year annual temperature. It is established the change of temperature extreme sizes (maximal and minimal). With linear (by period of 80 years) approximate trend of Batumi annual temperature grew up by  $0,7^{\circ}\text{C}/80\text{y}$ , annual temperature of Poti grew up by  $0,3^{\circ}\text{C}/80\text{y}$ . Maximal temperature of Batumi grew up by  $3,29^{\circ}\text{C}/80\text{y}$  and minimal by  $1,65^{\circ}\text{C}/80\text{y}$ , In Poti maximal temperature grew up by  $1,42^{\circ}\text{C}/80\text{y}$ , and minimal temperature grew up by  $1,21^{\circ}\text{C}/80\text{y}$ . The average size of wind direction has not changed.

Research results can be used to rate vulnerability of climate change and to create suitable events which will provide protection of economic, tourism, health care and natural ecosystem from negative impact of climate change.