Temperature Indices of Climate Change in Georgia

Mariam Elizbarashvili^a, Ina Keggenhoff^b, Bagrat Kikvadze^c, Nano Gogia^a, Nato Kutaladze^d, Neli Jamaspashvili^a

email: mariam.elizbarashvili@tsu.ge ^aDepartment of Geography, Ivane Javakhishvili Tbilisi State University I.Chavchavadze ave. 3, Tbilisi, 0128

^b Department of Geography Geomorphology, Global Change, Natural Hazards.

Justus-Liebig-University Giessen

Senckenbergstrasse 1, 35390 Giessen, Germany
^c Department of Geography, Institute of Earth sciences, Ilia State University,
Nutsubidze 77, Tbilisi, 0177 Georgia

^dThe National Environmental Agency,
D. Agmashenebeli ave.#150, 0112 Tbilisi, Georgia

Based on the data of observations of 50 meteorological stations in Georgia, spanning the period from 1936 to 2011, several temperature indices of the climate change have been researched – extreme temperatures, frosty and hot days. Geoinformational maps of spatial structure have been built and the dynamic of the indices over the period of global warming have been studied. Average values of indices for various averaging times have been determined.

Obtained results can be used in generalizing corresponding indices for the Caucasus region, Black Sea basin or Southwest Asia.