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Assessment of the bioclimate of Northwest region at various scenarios of climate change**Marina Trubina**

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Statement of the Problem: The scenarios of climate change created by the Coupled Model Intercomparison Project Phase 5 (CMIP5) during 2011-2060 evidence average annual temperature in some regions of Russia will increase by 1.6-7.0°C. The main risks for human health are connected with change of frequency and intensity of heat waves, spread of the southern infectious diseases in northern latitudes, emergence of earlier uncharacteristic natural and focal diseases and zoonosis.

Purpose: The purpose of work is the assessment of bioclimatic capacity of the Russian Northwest region at scenarios of climate change of RCP2.6, RCP4.5 and RCP8.5 during 2011-2060. Development of effective measures for easing adaptations to climate change, demands medico-geographical approaches, creation of new biometeorological models and introduction of system of medical weather forecasts. Research includes biometeorological monitoring (creation of a multiparametrical database, calculation of the main biometeorological indexes), modeling of change of biometeorology conditions on the basis of results of the CMIP5 model during 2011-2060, assessment interseasonal acclimatization by using the mathematical model created by V.A. Matiukhin (Russia, Novosibirsk).

Results: The result of research will be applied to creation of medico-geographical electronic cards and recommendations about mitigation of adaptation of the population to climate change.

Findings: This study is a step towards the use of information technology in biometeorology, development bioclimatic assessment techniques, determining the vector of interdisciplinary research and demands new methods and technologies for data processing.

Biography

Marina Trubina has completed her Diploma of the Meteorologist from Russian State Hydrometeorological University (RSHU) in Russia. She has completed her PhD in Geography at RSHU. She was the Director of Computer Center, Researcher and Assistant Professor from RSHU and has published more than 200 papers in scientific journals. Currently she is the Chairman of the Commission of Medical Geography of the Russian Geographical Society (RGS), renowned Expert in the field of applied climatology, biometeorology, human ecology and space weather. Her basic research interests are biometeorology, space weather, heliometeorology, medical weather forecasts, human ecology and balneology.

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