

**GEOINFORMATION SYSTEM OF SOIL COVER OF THE REPUBLIC OF BASHKORTOSTAN
FOREST-STEPPE ZONE
(short communication)**

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The paper presents the results of soil cover web-mapping in the forest-steppe zone of the Republic of Bashkortostan. Insufficient development of the regional GIS of soil cover presented through the web interface, necessitated the creation of the «Geoinformation system of soil cover of the forest-steppe zone of the Republic of Bashkortostan». Its main purpose was to eliminate the digital divide in the context of access to soil-cartographic data. The ultimate goal of GIS is to make scientifically sound decisions on agroecological typing, cadastral and soil-ecological assessment of lands. The purpose of the research was to develop and test a method for integrating soil-cartographic materials with open Web-GIS solutions for modern visualization and effective use of soil maps using the example of a large-scale level in the forest-steppe zone of the Republic of Bashkortostan. The territory for which the GIS was developed covers 8 administrative districts of the Republic: Askinsky, Baltachevsky, Buraevsky, Karaidelsky, Krasnokamsky, Mechetlinsky, Tatyshlinsky, Yanaulsky. Spatial data of the geographic information system of soil cover include thematic information presented by soil-cartographic units. Basic data include a topographic layer containing general geographic information from open sources – OpenStreetMap. Thematic data were formed from soil maps made by «Bashkir State Agrarian University» and VolgoNIIgiprozem at a scale of 1:25000. The GeoServer serverlet used in this system allowed to significantly increase the performance of the displayed spatial data, especially when working with layers containing thousands of objects. Web-GIS of soil cover of the forest-steppe zone of the Republic of Bashkortostan is the first information resource of this kind for the Middle Cis-Urals. GIS provides users with access to a significant volume of soil mapping information: 14,452 soil contours distributed by regions.

Key words: geospatial database, soil map; web mapping, OpenLayers.