

## **TRANSFORMATION OF SPATIAL DATA INTO THE STATE GEODETIC COORDINATE SYSTEM OF 2011 IN GIS SOFTWARE**

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The article describes the implementation of the coordinate transformation procedures in GIS (on the example MapInfo Professional) between the existing in the country coordinate systems (SC-42, SC-95, MCS, based on them) and SCS-2011, allowing the reader to learn how to calculate the parameters of Helmert transformations between these coordinate systems using GOST 32453-2017. The article notes the problem of the transformation accuracy on the global parameters established by GOST 32453-2017 and the resulting need to determine local versions of these parameters, leading to the creation of uncoordinated spatial data sets in GSK-2011, additional costs and complicating work of consumers. In order to solve this problem, it is proposed to consider the formulation of the task of transition to the implementation of cadastral work from coordinate systems based on SC-42 to MCS, created at SCS-2011, as an actual problem of improving the geodetic support of the country

**Keywords:** The State Geodetic Coordinate System of 2011, SCS-2011, Geographic Information Systems software, GIS software, spatial data, coordinate systems, coordinate transformations, datum

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