

Mineral Prospectivity Modeller

Enhanced data-analysis techniques are essential due to increasing amount of digital data collected during mineral exploration. The expanding mineral exploration and mining activity set demand for the development of time-saving, cost-effective and environmentally neutral exploration techniques. The project Mineral Prospectivity Modeller (MPM, 2016-2018) investigates and implements new workflows and tools for mineral prospectivity modeling. Three tasks will be accomplished in the MPM project:

Task 1: ArcSDM. To support target scale mineral exploration, a public Spatial Data Modeler ArcSDM 5 toolbox is redesigned and recoded into ArcGIS for the use of consulting and exploration companies. Exploration in Lapland is promoted by distributing a free exploration dataset from northern Finland with the tool.

Task 2: MPM online tool. To support strategic planning of companies, the project produces a GIS-based online prospectivity modeller. The tool can be used to detect the most prospective areas companies to make claims for further target scale exploration.

Task 3: Dynamic modelling. The use of the ArcSDM tool will be demonstrated in a case study with real exploration data. The results of the project will be published in a report of investigation and scientific papers.

The project is solely carried out by GTK and funded by the Tekes-EAKR program Business from digitalization and internationally by exploration industry. Tekes funds 90% and companies 10 % of the total of 508,000 euro budget. Co-operation partners are ESRI, ESRI Germany, U.S. Geological Survey, Geological Survey of Canada and University of Campinas.

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<http://projects.gtk.fi/mpm/>



Follow the progress of the project at Facebook: Mineral Prospectivity Modeller Project
www-pages: <http://projects.gtk.fi/mpm>



Access to the most recent version of ArcSDM 5 through GitHub
<https://github.com/gtkfi/ArcSDM>



Mineral Prospectivity Modeller Online Tool: do your own fuzzy logic prospectivity modelling with northern Finland geodataset online <http://gtkdata.gtk.fi/mpm/>



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