

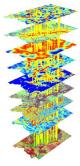
ArcSDM 5 Final Seminar May 4th 2018, Rovaniemi



Leverage from theEU 2014-2020



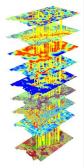
Outlook for exploiting the outcomes



- The bottom of the mineral exploration in Lapland was reached in the beginning of 2016. Tremendous recovery has been seen in the exploration activity since April 2016 and junior and mining companies are currently very active in exploration in Northern Finland. It is speculated that demand for data analysis in mineral exploration will grow accordingly and create opportunities for exploitation of the MPM outcomes.
- Feedback from the industry met in conferences indicates that there
 is a need for new tools and especially the web tools are interesting
 if the technology allows running the tools over the clients firewall
 without uploading the data into the server.
- ESRI Inc. has promised to investigate this possibility.

 In MPM we will build a demonstration with static for Sustainable Growth and Job's Leverage from

Outlook for exploiting the outcomes



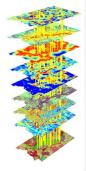
- The current boom in digitalization and utilizing artificial intelligence in all branches of science and technology can be seen beneficial for future development of MPM tools.
- The project group has been involved in many project funding applications during the MPM project, several of them have turned out successful, securing the future development of ArcSDM for the next few years.
- For example, projects such as **XL3D** (funded by Business Finland -ERDF), **NEXT** (H2020) and **oGIIR** (Academy of Finland) will continue the work started at MPM.







Outlook for exploiting the outcomes



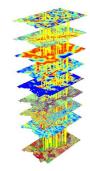
- There is a wide interest on user friendly spatial data analysis tools in the geological community.
- A future outlook is to develop the tools compatible to open GIS software such as QGIS. An open GIS platform would make the tools accessible for even wider audience.
- In the future, it is seen prospective to apply artificial intelligence including machine learning and deep learning algorithms for mineral prospectivity mapping.







Indirect impacts of the project in other organisations and/or societal impacts



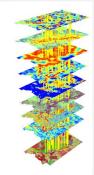
- The unexpected contact from ESRI Germany and project funding from several international companies shows that there is international interest in the updated version of ArcSDM.
- The ArcSDM toolbox developed in MPM project can be used also for other purposes and in a wide variety of applications utilizing spatial data. Such examples could be e.g. in environmental research or epidemiology using spatial datasets.
- The marketing of the tools is a key for how the tools will reach.
- There is an on-going EIT RM funded project "MAP" that is already Programme for Sustainable Growth and Jobs these tools in another toolbox for assessment of undiscovered mineral resources.







Indirect impacts of the project in other organisations and/or societal impacts



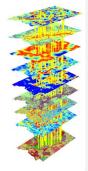
- The MPM tools are already in active use in consulting and exploration companies based on the feedback we have received through GitHub.
- Once the MPM tools and datasets from Northern Finland are fully launched and marketed it should increase awareness of exploration opportunities in Finland.
- The tools can be used for teaching purposes and thus improve the worldwide awareness of Finnish exploration opportunities amongst the young scientists in geology.







Conclusions



- GTK is going to continue maintenance and support of ArcSDM5 toolbox by utilizing crowdsourcing and GitHub
- MPM online tools have high potential for various applications
- GTK MPM team calls for an international consortium aiming at seeking funding and planning a project to create an open GIS platform MPM toolbox

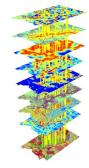






THANKS

BUSINESS Tekes



European Union

European Regional

















