



DOSoReMI.hu: collection of countrywide DSM products partly according to GSM.net specifications, partly driven by specific user demands

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Due to former soil surveys and mapping activities significant amount of soil information has accumulated in Hungary. In traditional soil mapping the creation of a new map was troublesome and laborious. As a consequence, robust maps were elaborated and rather the demands were fitted to the available map products. Until recently spatial soil information demands have been serviced with the available datasets either in their actual form or after certain specific and often enforced, thematic and spatial inference. Considerable imperfection may occur in the accuracy and reliability of the map products, since there might be significant discrepancies between the available data and the expected information. The DOSoReMI.hu (Digital, Optimized, Soil Related Maps and Information in Hungary) project was started intentionally for the renewal of the national soil spatial infrastructure in Hungary. During our activities we have significantly extended the potential, how soil information requirements could be satisfied. Soil property, soil type as well as functional soil maps were targeted. The set of the applied digital soil mapping techniques has been gradually broadened incorporating and eventually integrating geostatistical, data mining and GIS tools.

Soil property maps have been compiled partly according to GSM.net specifications, partly by slightly or more strictly changing some of their predefined parameters (depth intervals, pixel size, property etc.) according to the specific demands on the final products. The elaborated primary maps were further processed, since even DOSoReMI.hu intended to take steps for the regionalization of higher level soil information (processes, functions, and services) involving crop models in the spatial modelling. The framework of DOSoReMI.hu also provides opportunity for the elaboration of goal specific soil maps, with the prescription of the parameters (thematic, resolution, accuracy, reliability etc.) characterizing the map product. As a result, unique digital soil map products (in a more general meaning) were elaborated regionalizing specific soil (related) features, which were never mapped before, even nationally with high (~1 ha) spatial resolution. Based upon the collected experiences, the full range of GSM.net products were also targeted. The web publishing of the results was also elaborated creating a proper WMS environment. Our paper will present the resulted national maps furthermore some conclusions drawn from the experiences.]

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