

Advangeo® - Usage of methods of artificial intelligence for comprehensive modeling of events and phenomena (e.g. erosion, mineral deposits and occurrences, forest pests, coal fires) or regionalization of measurements (e.g. soil parameters, element content)

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Abstract

The software product advangeo® makes the artificial intelligence approach available in a standard GIS environment.

Based on the on the learning ability of artificial neural networks, both visual observations as well as measurements can be reliably regionalized and predicted with advangeo® with manageable cost and time effort.

advangeo® was applied in several use cases: regionalization of moisture und humus levels in forest soils, regionalization of soil pollution in urban areas, prediction of erosion susceptibility of soils (e.g. gully formation, areal extensive erosion, soil creeping), prediction of mineral occurrences.