

## **A new geological data model for the Geological Survey of Austria**

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All data models follow the goal to abstract the reality of things as good as possible for a certain purpose. For geological data the abstraction process is challenging and therefore different models were created according to the view on geology of different geologist. Nevertheless, standardisation is a big task at the Geological Survey of Austria. Here we want to present a new geological data model for Austria. This model is the outcome of ongoing discussion through the last years and is now applied to newly created data as well as old data, which are tried to be transformed into the new model. The most outstanding feature of this new model is the use of a multi-layer approach. The base-layer is seamless and represents rock units assigned to tectonic units. As the outcropping of this base-layer is limited in the field a lot of geological interpretation using structural geology, drillings, etc. has to be applied. In some regions in Austria, it is quite hard to get a well interpreted seamless base-layer, nevertheless this is essential for possible further derivations of 3D - 4D models, and generalised small-scale maps/datasets . On top of the "hard rocks in tectonic units" layer several more layers are intended in the model. Amongst them are rocks associated to basins, Quaternary deposits, geomorphology, structural geology and tectonics. In combination with other standardisation tools (e.g. nomenclatures of geological units) we try to meet the requirements of a modern geological service for Europe as well as for the regional geological history and characteristics. This contribution will give an impression of the data model itself and a recently created map using this model.