

3rd European meeting on 3D geological modelling  
Wiesbaden, 16th – 17th June 2016

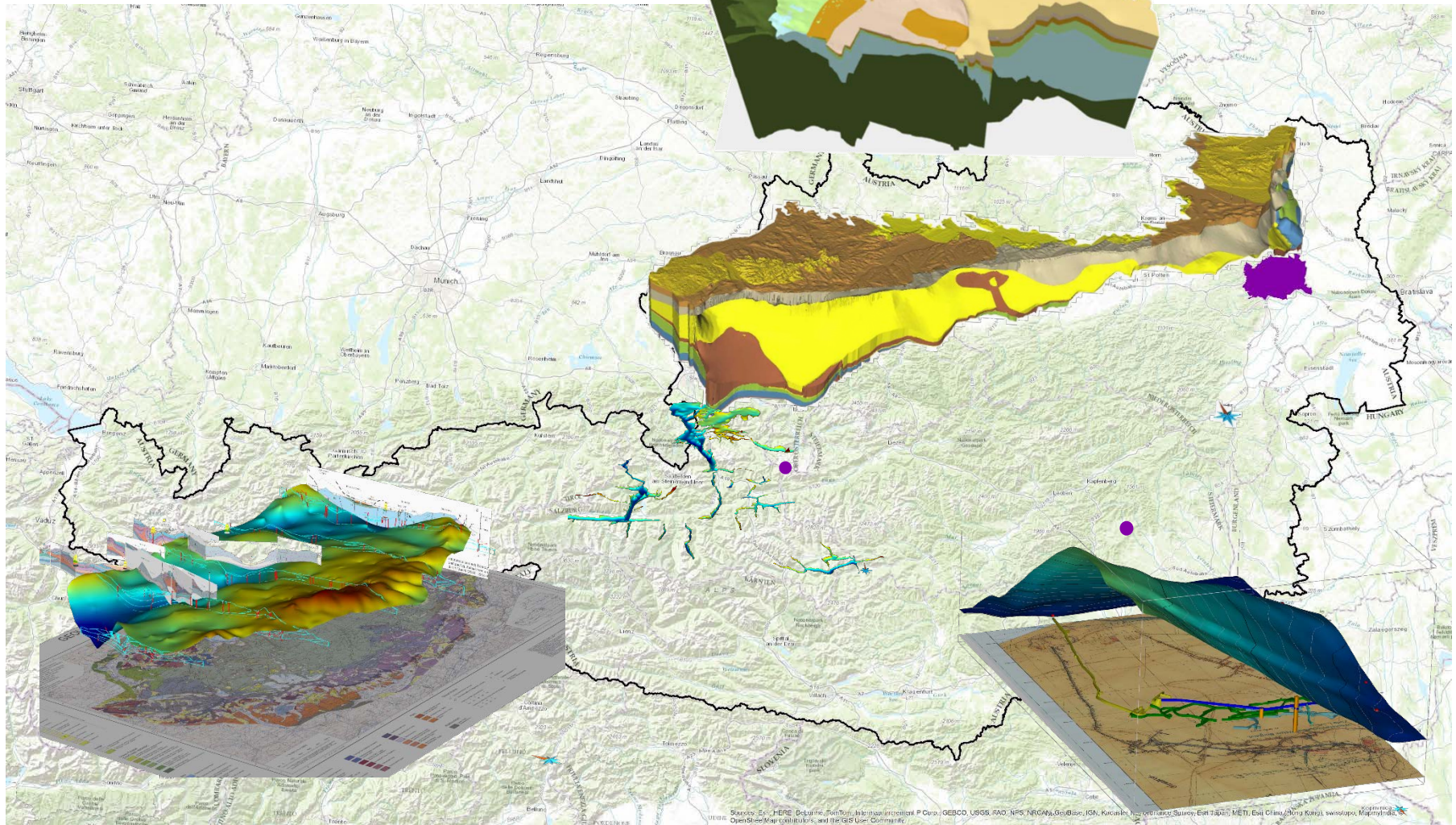
# Country overview & highlights

## Geological Survey Austria

Bottig Magdalena, Pflaiderer Sebastian, Porpaczy Clemens

[Magdalena.Bottig@geologie.ac.at](mailto:Magdalena.Bottig@geologie.ac.at)

# Recent models

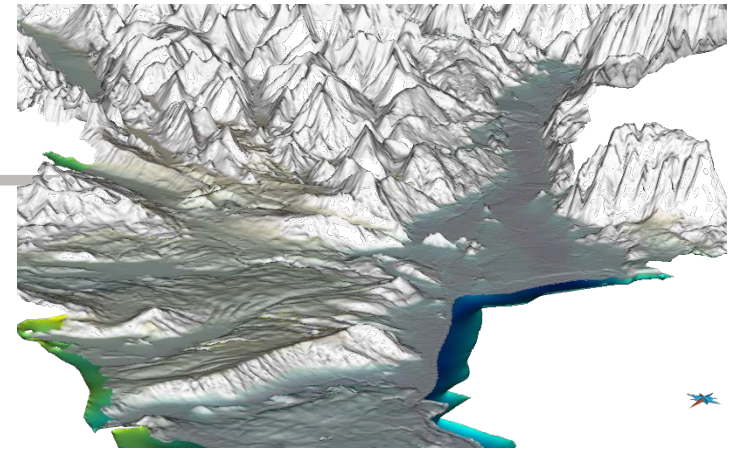


# Applications / Uses

## Shallow geothermal use

BHE potential map for the province of Salzburg

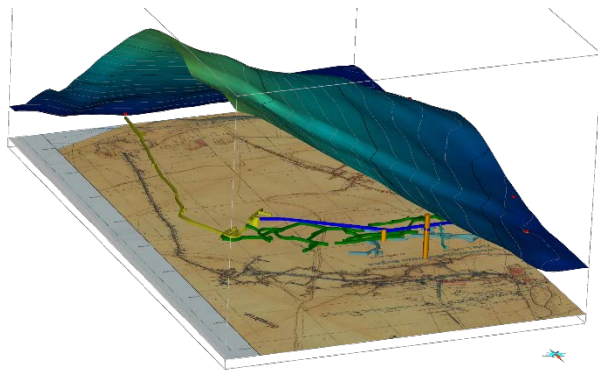
3D model of overdeepened Alpine valleys filled with quaternary sediments as base for potential maps



Abandoned mines – geological 3D model of the Arzberg mountain

Re-use of the abandoned Pb, Zn, Ag mine for NSGE

One part is used for cheese production



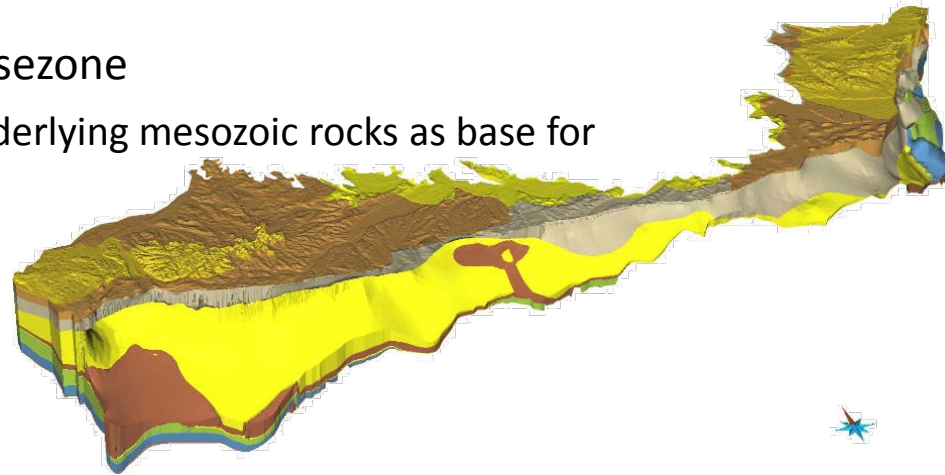
# Applications / Uses

## Deep geothermal use

### Geomol Project – 3D model of the Molassezone

Model of the Molasse sediments and underlying mesozoic rocks as base for numerical simulations

Common usage of the Malm aquifer



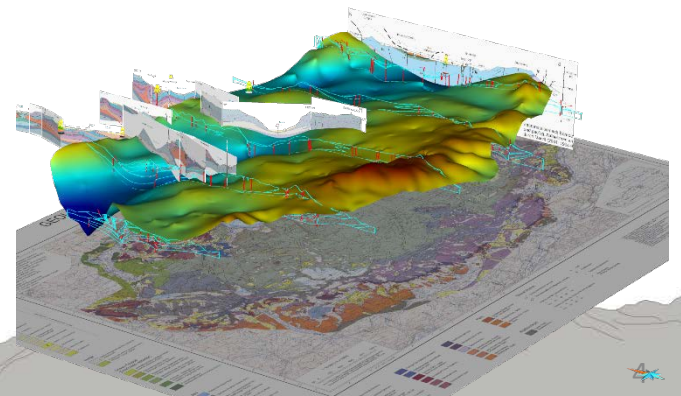
## Conceptual model

### Dachstein mountain range – geological 3D model

Complex geology and rare drilling data

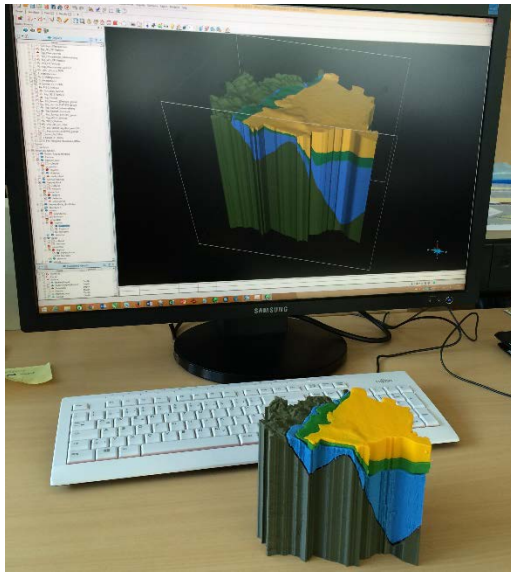
Interesting in many terms like salt production | caves | skiing resorts |

ancient city Hallstatt



# Applications / Uses

## Public relations – 3D model of Vienna's underground



**3D geology**


### Geologisches 3D Modell von Wien

Mithilfe der Webapplikation „3D Geology“ können geologische 3D Modelle interaktiv durch einen Webbrowser dreidimensional erkundet werden. Via Maussteuerung lässt sich das 3D Modell hin- und herdrehen (linke Maustaste), verschieben (rechte Maustaste), sowie hinein- und herauszoomen (Mausrad). Über ein Bohrungstool lassen sich virtuelle Bohrprofile an jeder Position des 3D Modells generieren, welche am linken Rand des View-Fensters angezeigt werden. Mithilfe eines Slicers können aus dem dargestellten 3D Modell anhand von Schieberegler virtuelle Profilschnitte in x-Ebene (Nord-Süd-Schnitt) und y-Ebene (Ost-West-Schnitt) abgefragt werden.

**LEGENDE**

- Oberpannonium
- Mittelpannonium
- Unterpannonium
- Sarmatium
- Badenium
- Basement

A screenshot of the 3D geology web application. It shows a 3D model of Vienna's underground with various colored layers. A legend on the left lists the geological units: Oberpannonium, Mittelpannonium, Unterpannonium, Sarmatium, Badenium, and Basement. The application interface includes a toolbar with navigation controls and a coordinate system at the bottom right showing the location: LON: 17° 55' 43" E, LAT: 50° 00' 23" N.



**Thanks**  
to the organizing team  
to Peter Wycisk & Lars Schimpf  
for your attention!

17:00 Live demonstration of the 3D model viewer