Workshop on the Danube Region Geothermal Concept (DanReGeotherm)

Budapest, 28 November 2013
Geological and Geophysical Institute of Hungary

Country update: Austria

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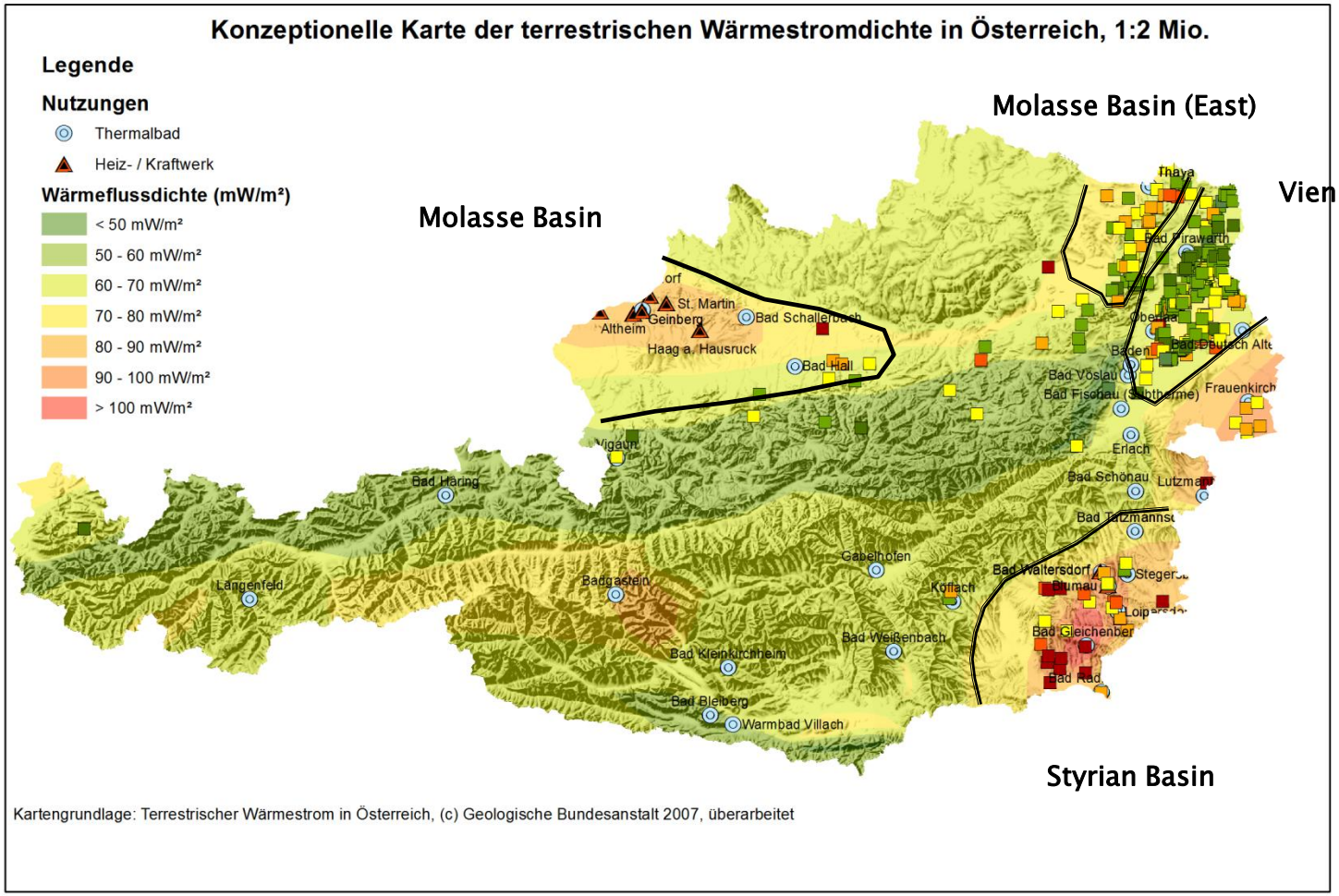
Geological Survey of Austria

Multiple any of the slides if necessary
Keep in mind that each country has strictly 10 mins for presentation!

Main deep geothermal reservoirs



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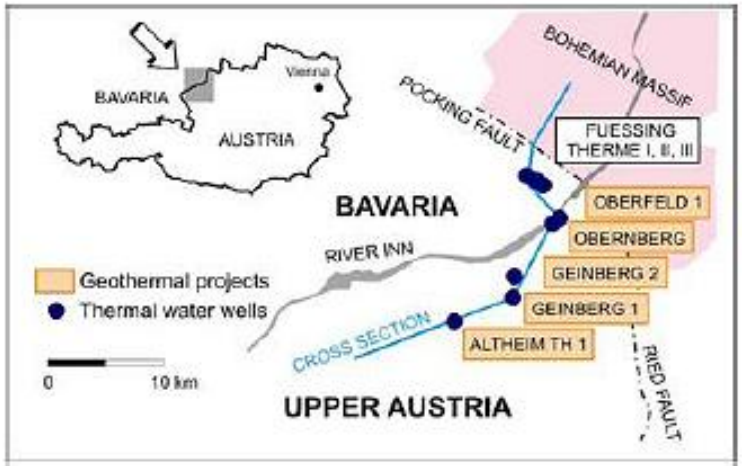
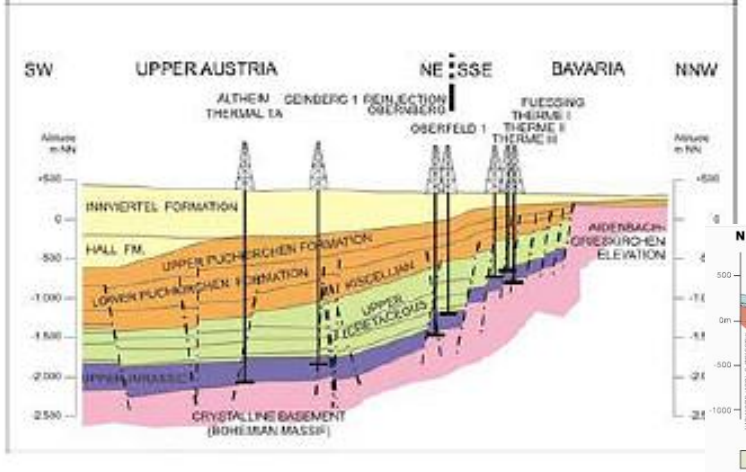
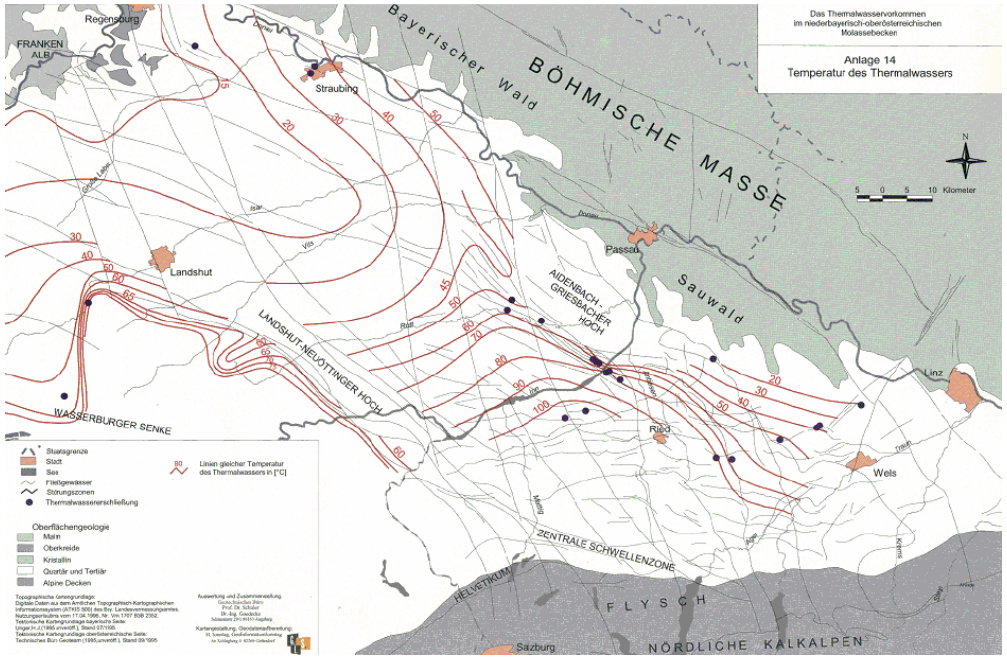
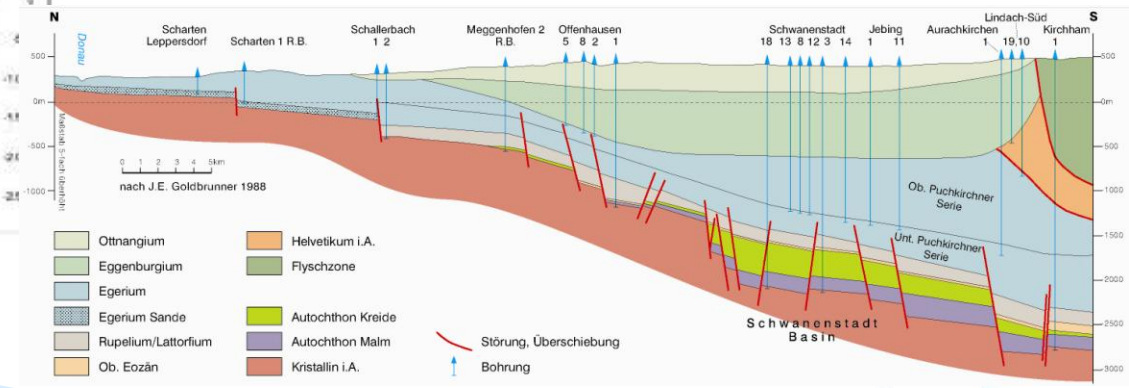
Main deep geothermal reservoirs

Molasse Basin (Upper Austria, Salzburg)



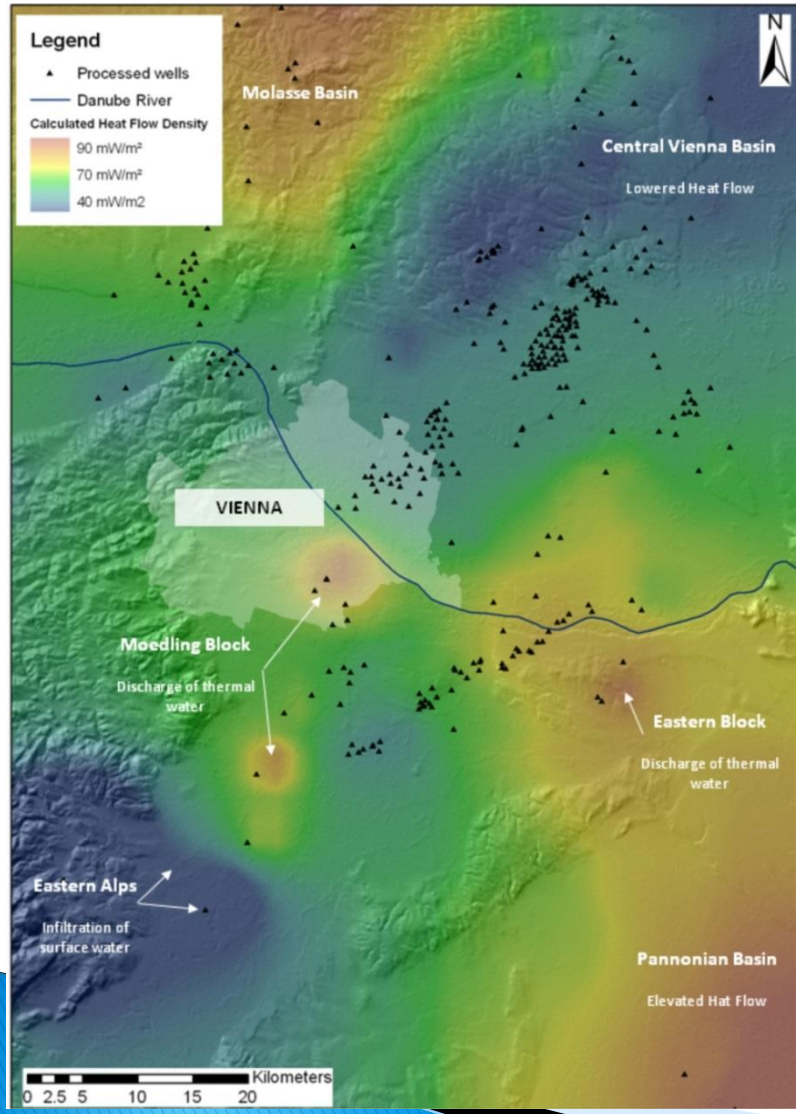






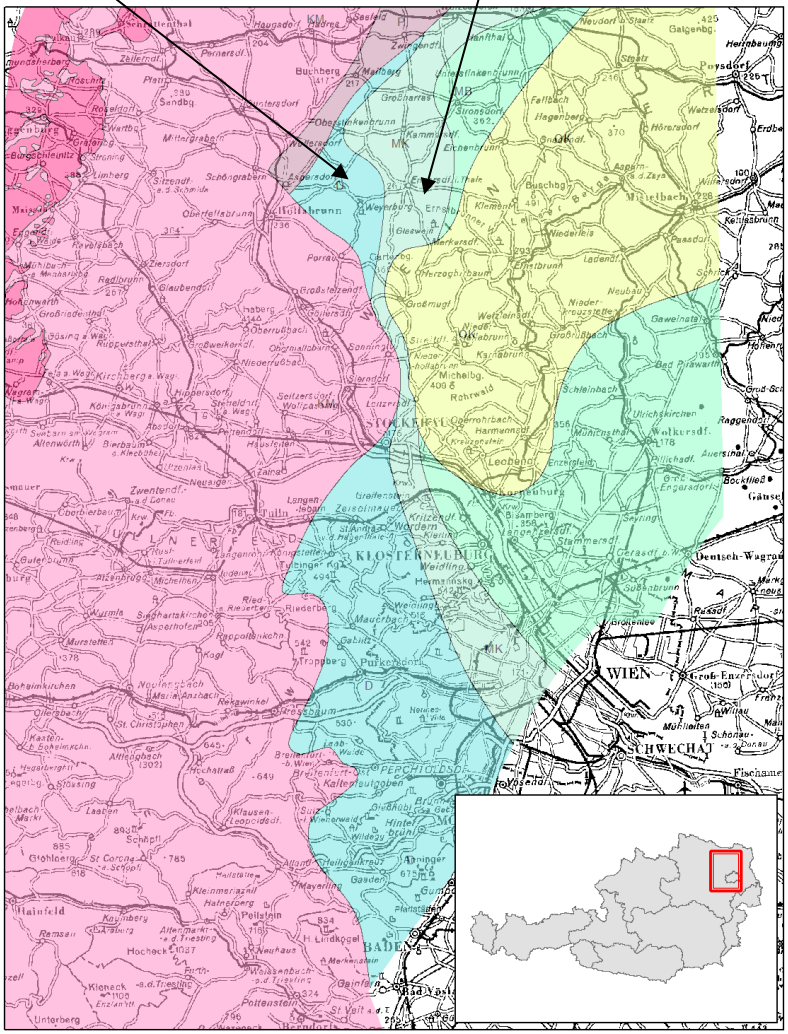
Main deep geothermal reservoirs

Molasse Basin (Lower Austria)



Dogger sediments (Arenits & Dolomite)

Malm sediments (Limestone)



Main deep geothermal reservoirs

Molasse Basin (Lower Austria)

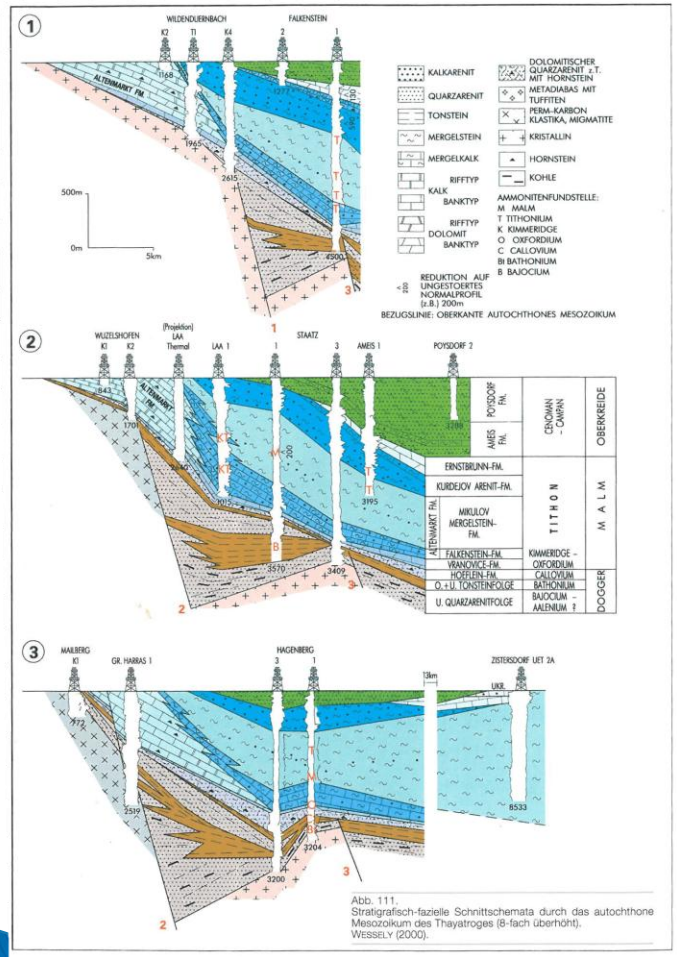
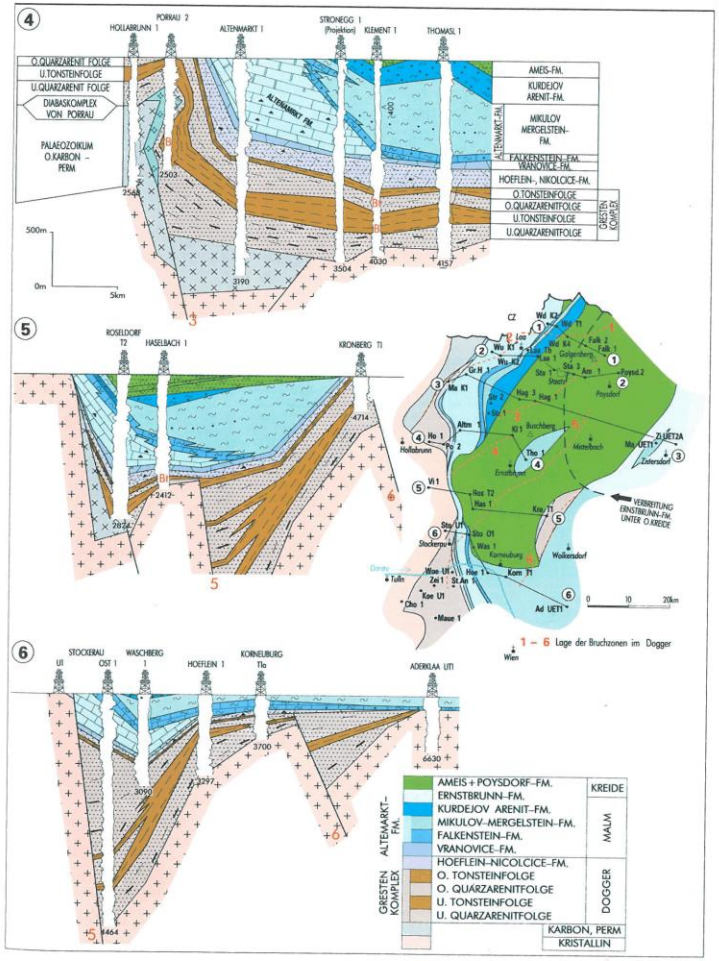


Abb. 111.
Stratigrafisch-fazielle Schnittschemata durch das autochthone Mesozoikum des Thayatroges (8-fach überhöht).
WESSELY (2000).



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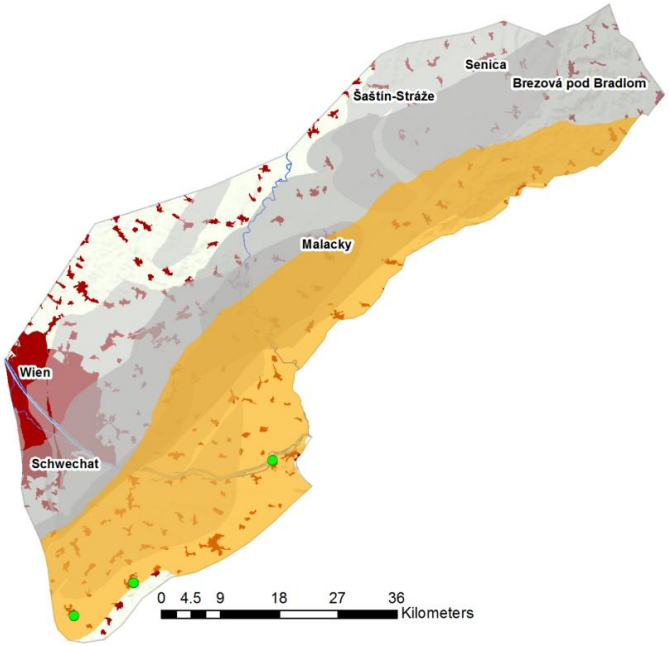
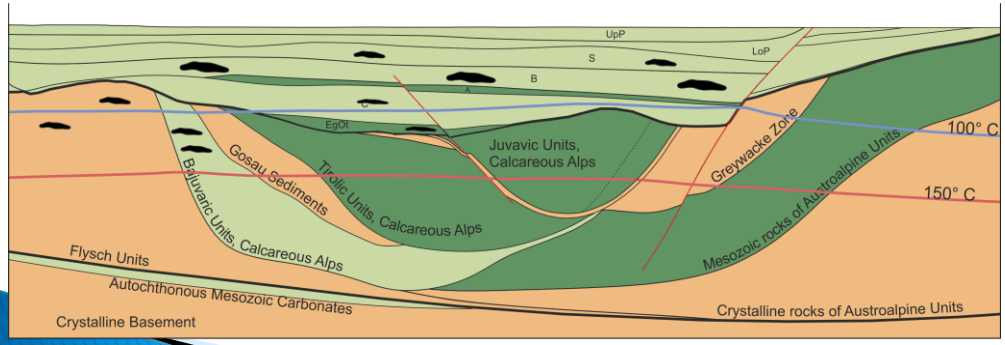
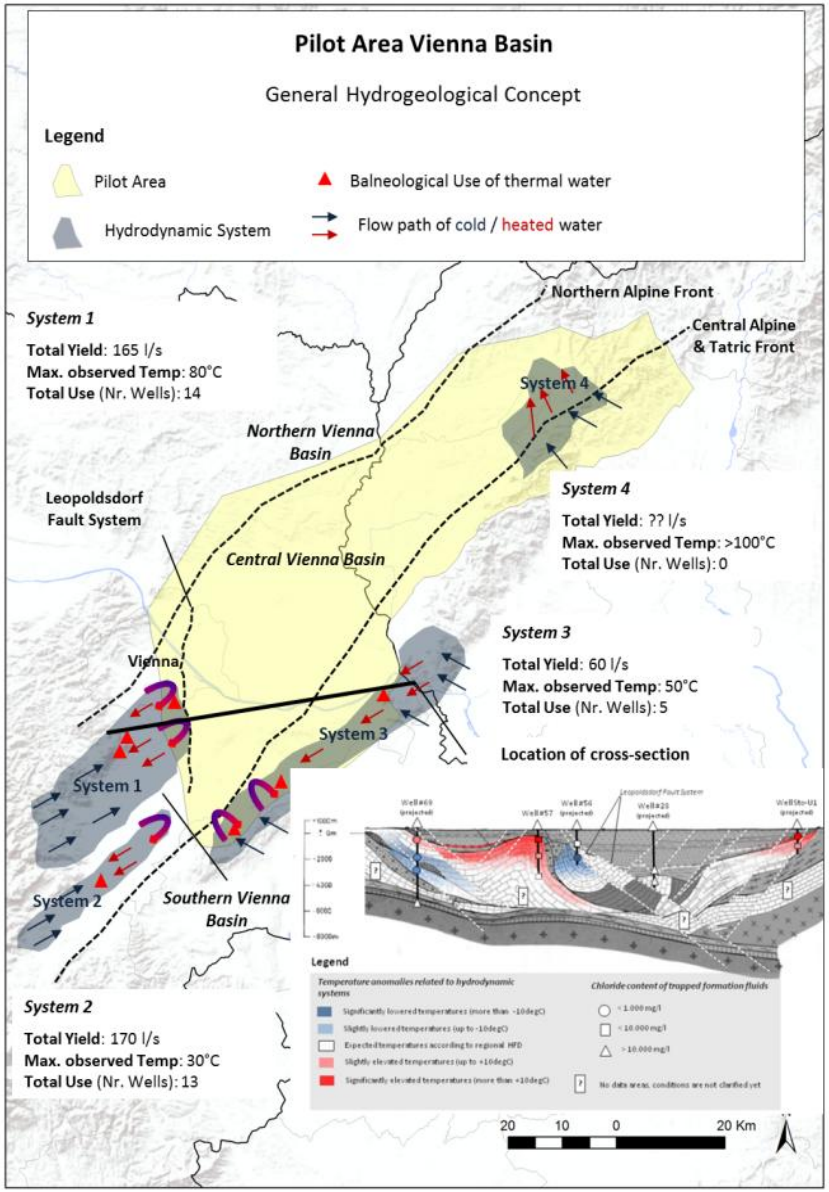
Main deep geothermal reservoirs

Vienna Basin





UpP - Upper Pannonian, LoP - Lower Pannonian, S - Sarmatian, B - Badenian, A - Aderklaa Conglomerate C - Carpathian, EgOt - Eggenburgian, Ottnangian



Main deep geothermal reservoirs

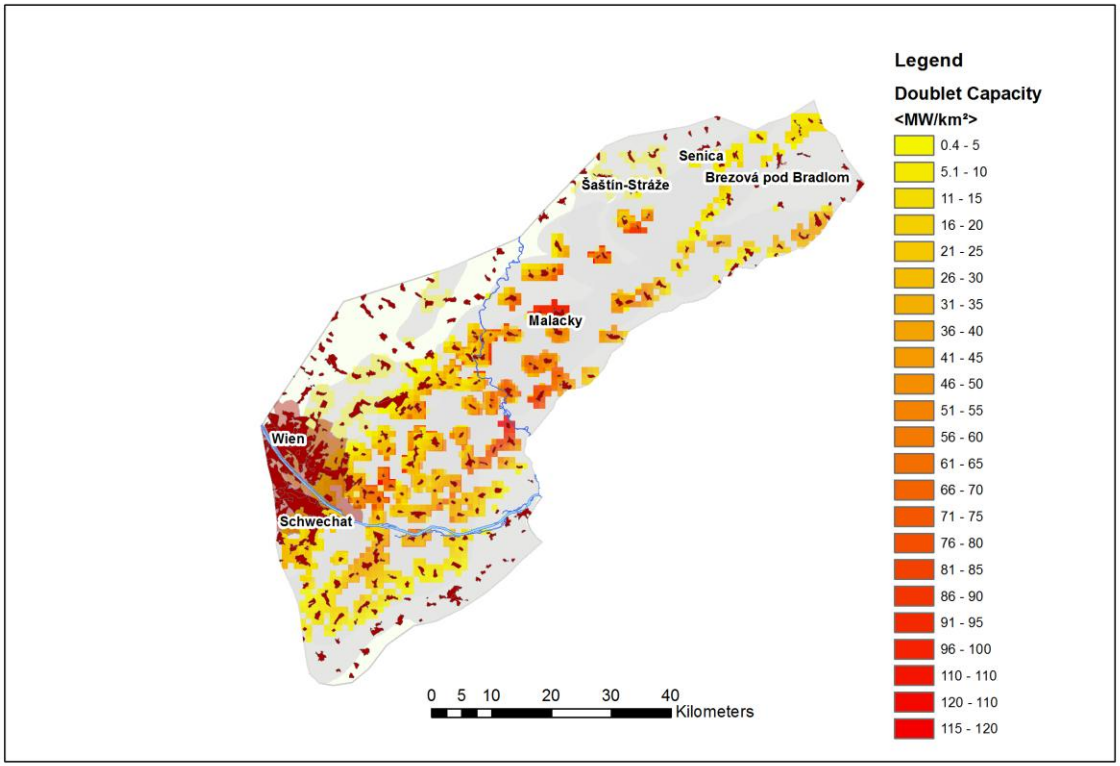
Vienna Basin

Probable Reserves

Hydrogeothermal Play
1a – Tirolic Nappes
1b – Juvavic Nappes
2 Deltafront Sediments
3 – Aderklaa Conglomerate
4 – Central Alpine & Tatric Units

All Hydrogeothermal plays

Area of utilization 1000 meters around settlement



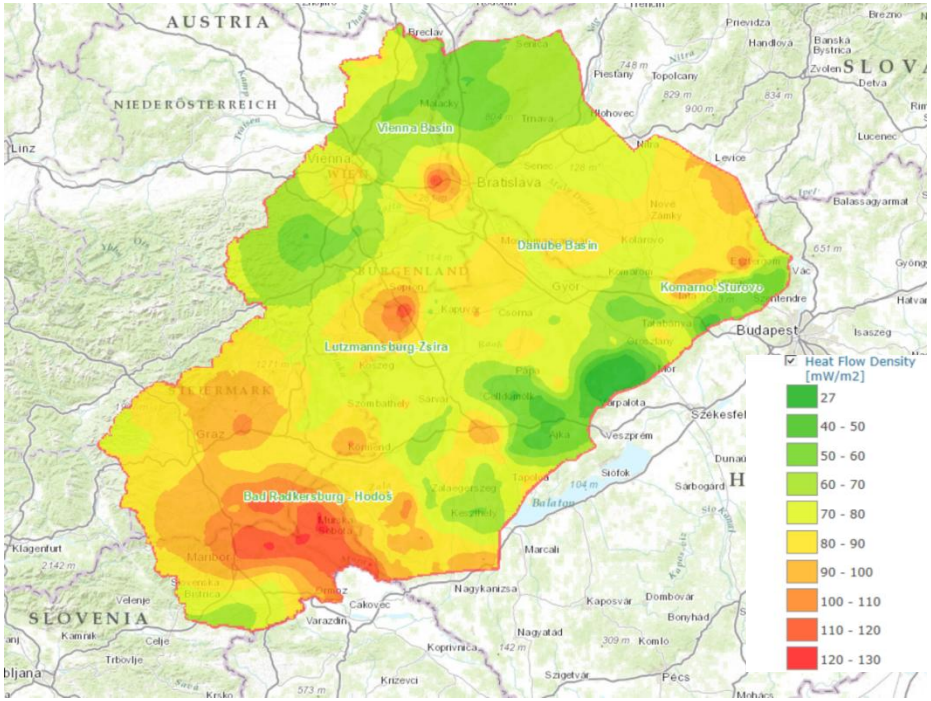
$\sum$ = **49.273 GW_{TH}**

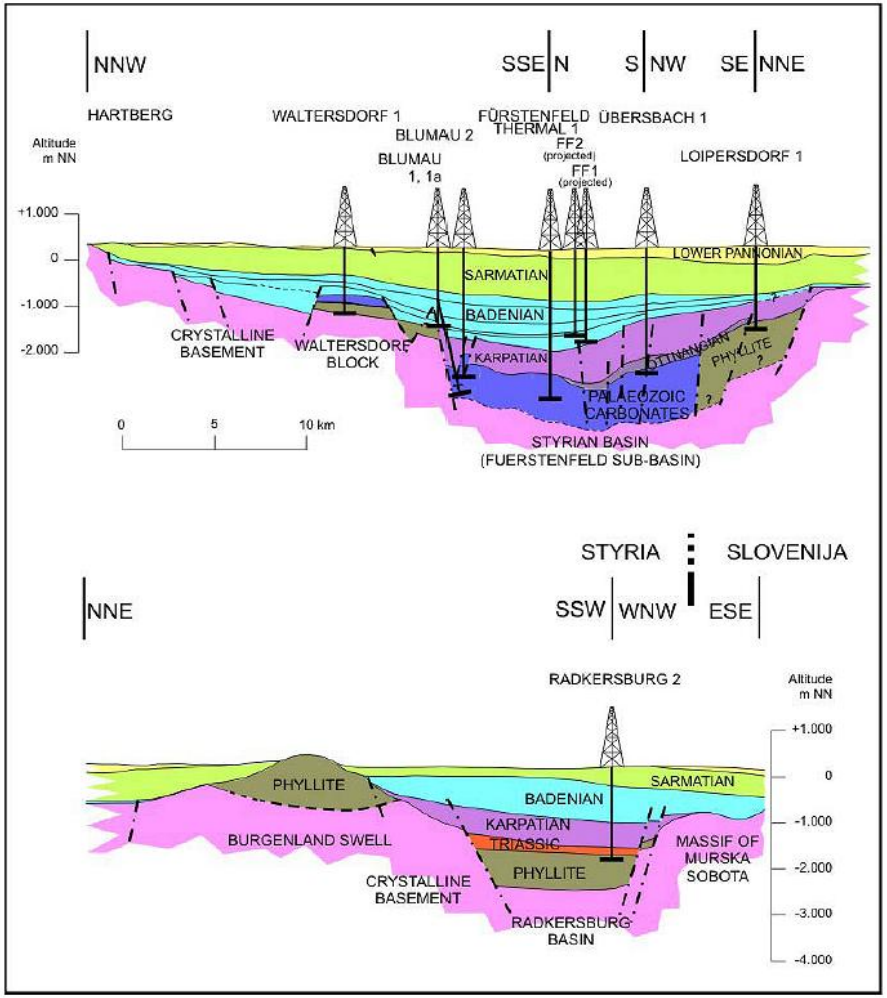
[1]Referring to a maximum distance to settlement area of 1000 meters

Main deep geothermal reservoirs

Styrian Basin

Heatflow density – Transenergy region





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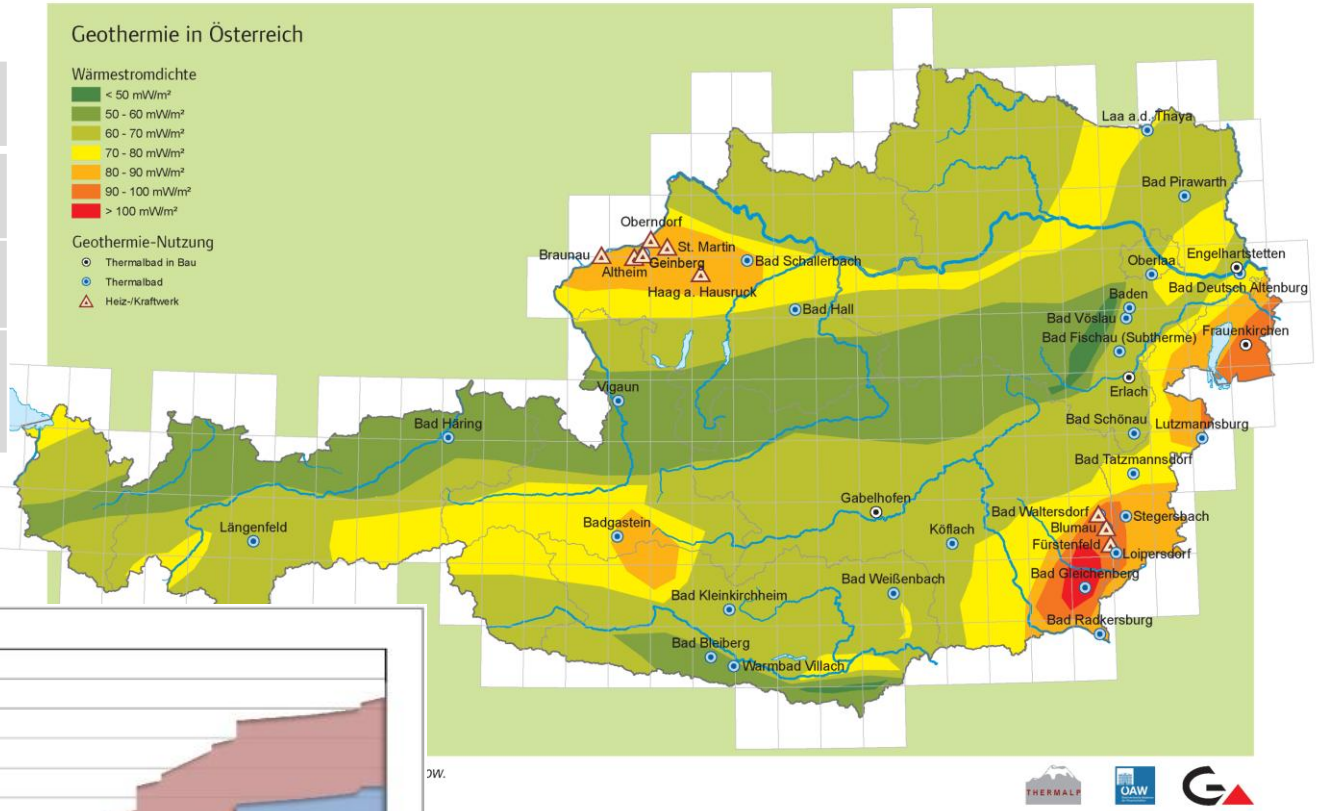
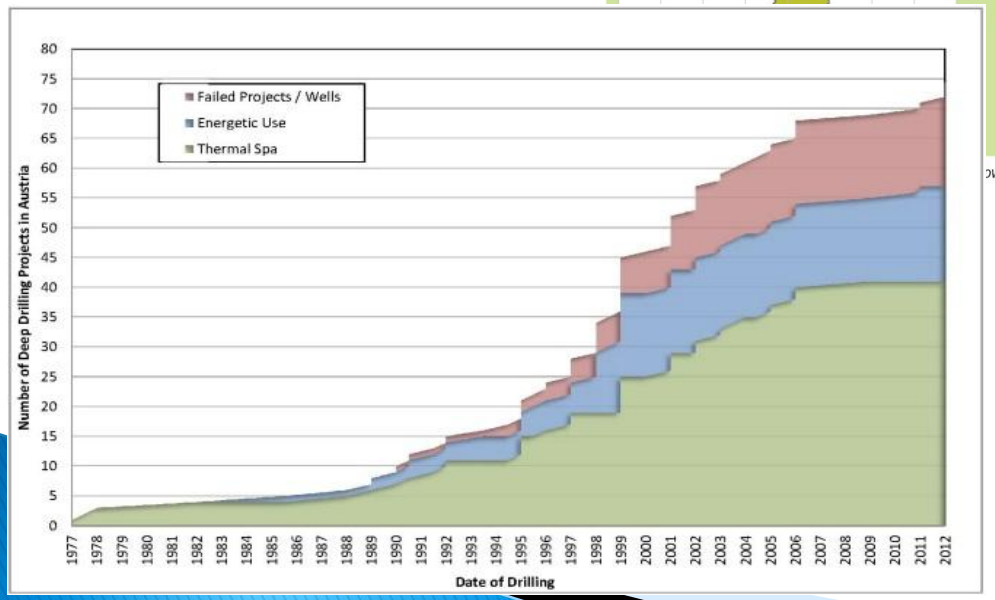
Main types of current utlization of geothermal energy

Total Capacity GDH	51.5 MW
Total Capacity Electric power	2 MW
Number of GDH plants	8
Number of electric power plants	2





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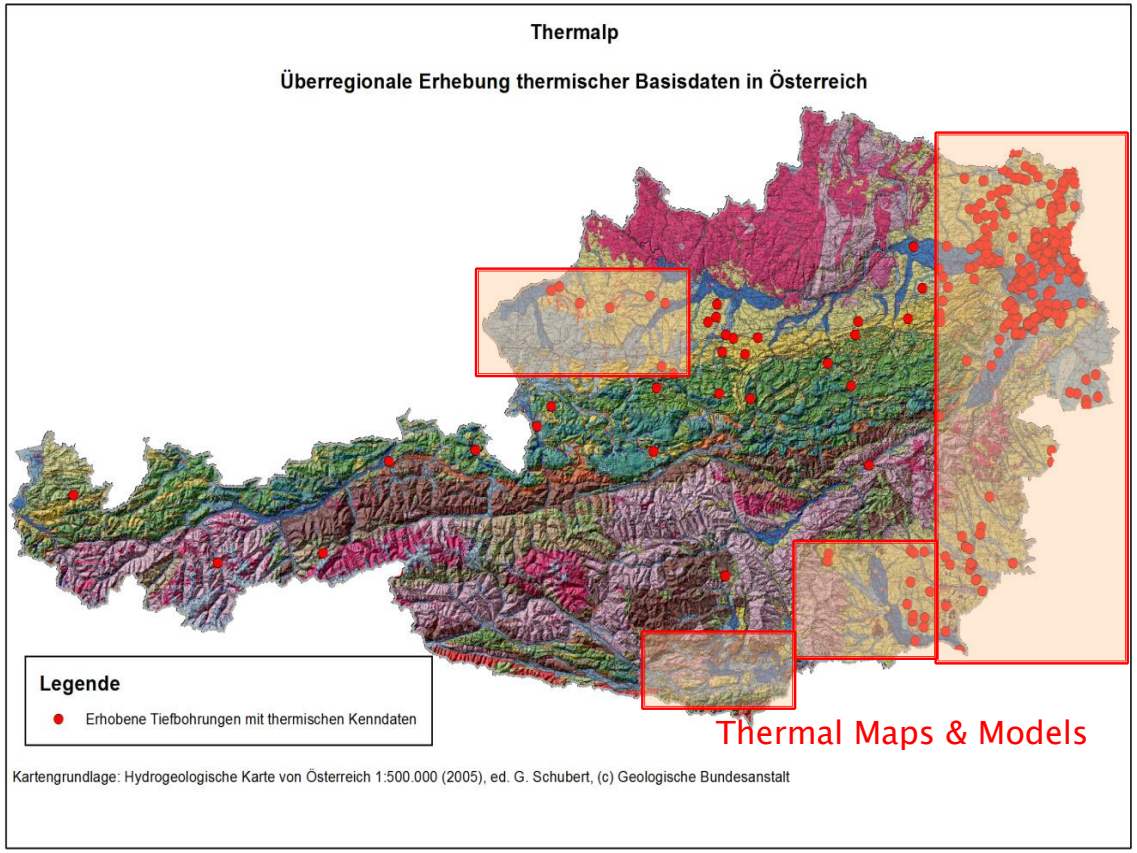
Data policy

- GBA obtains the largest collections of thermal data in Austria
- In total ~1000 temperature measurements available in Austria
- ~50% of vailable data published
- Thermal surveys by GBA in Alpine Regions



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Main stakeholders of geothermal projects

- Authorities: lebensministerium.at, bmwfi Bundesministerium für Wirtschaft, Familie und Jugend + state authorities
- Energy supplier: ENERGIE AG Oberösterreich, WIEN ENERGIE – FERNWÄRME WIEN –
- Communities:
- Wellness & tourism: VAMED

- No expert association for geothermal energy established yet in Austria

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