

Engaging Schools and Communities in Geothermal Monitoring

Case Studies from the DeepStor Research Infrastructure

Jerome Azzola, Judith Bremer, Katharina Schätzler, Florian Bauer, Thomas Kohl

jerome.azzola@kit.edu, Karlsruhe Institute of Technology, Institute of Applied Geosciences, Geothermal Energy and Reservoir Technology

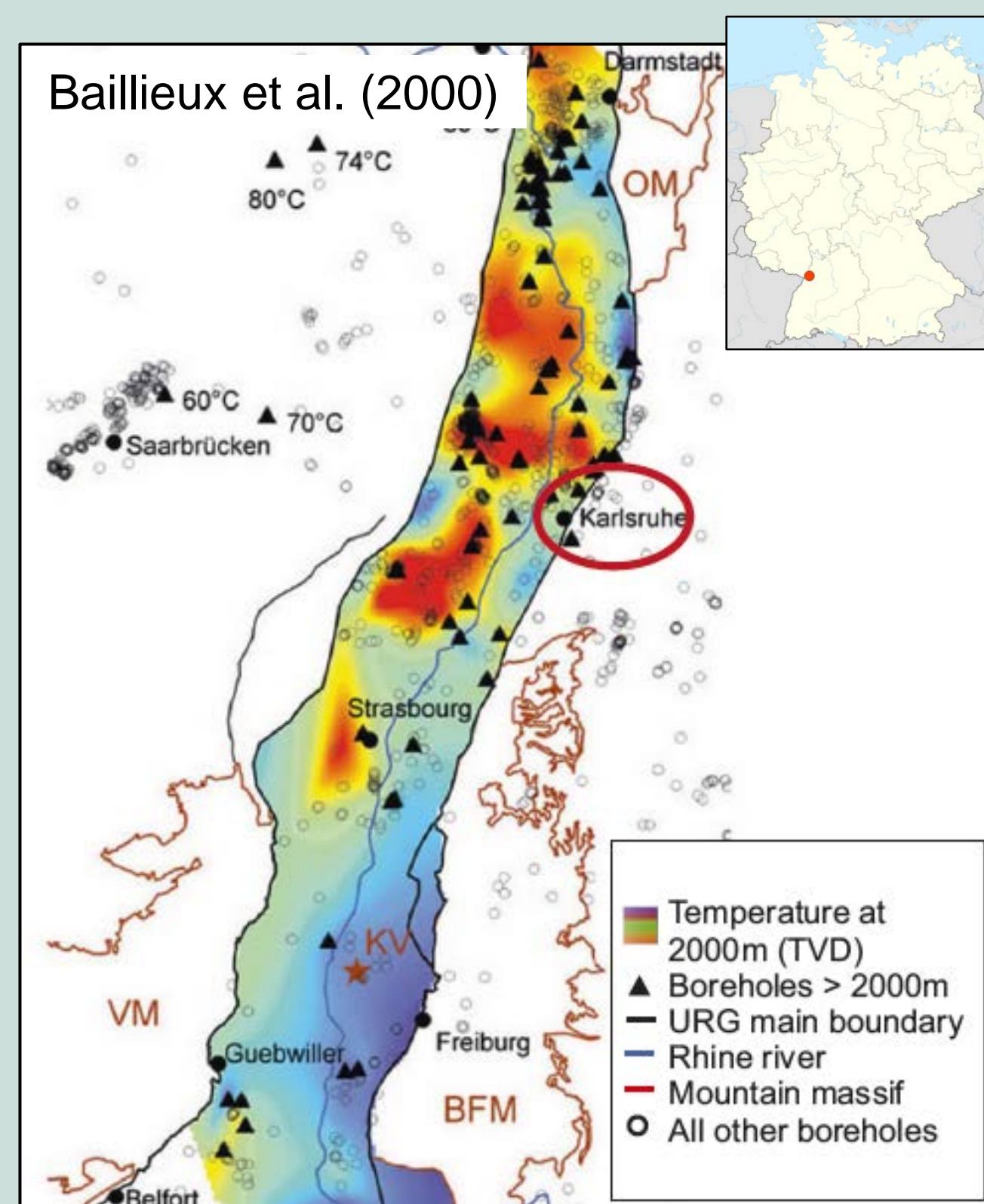
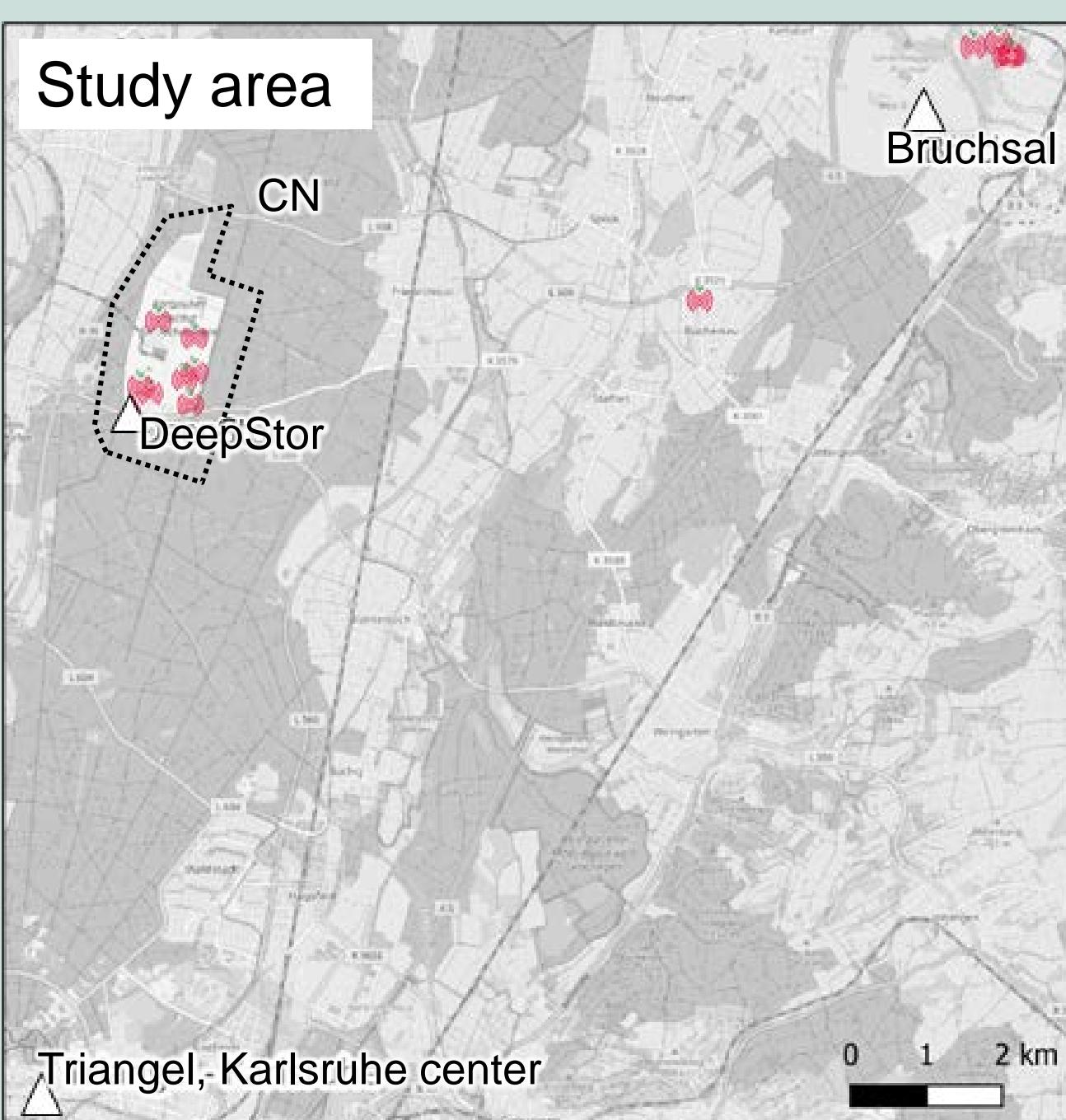


BACKGROUND: Geothermal projects can face negative public perception. **Induced seismicity** raises concerns and plays a crucial role in shaping social acceptance of geothermal projects.

POSSIBLE EXPLANATIONS: Insufficiently communicated scientific complexities, mistrust, ineffective dialogue, limited opportunities for public engagement...

POSSIBLE SOLUTIONS: Transparent exchange with citizens ; engage citizens in geothermal research and in the development of projects.

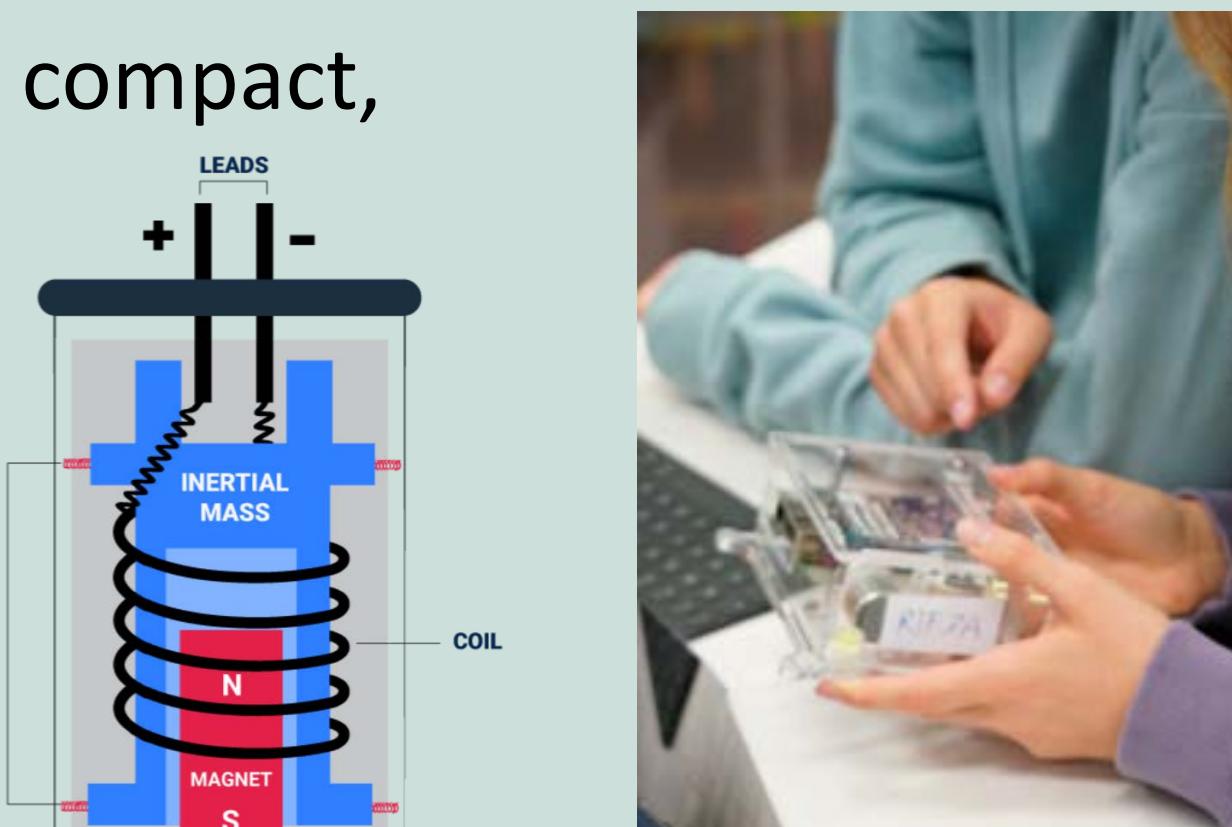
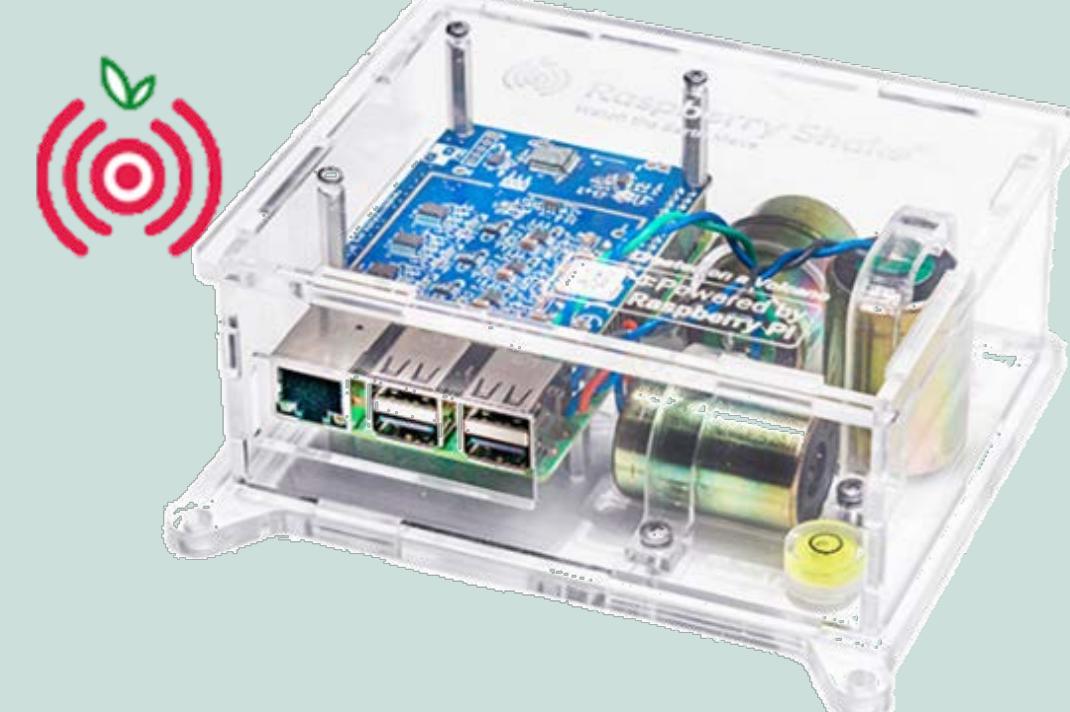
CONTEXT



WHERE: Upper Rhine Graben, around the research infrastructure DeepStor, on the KIT Campus North (CN).

DEEPSTOR investigates the concept of aquifer thermal energy storage to address seasonal fluctuations in heat demand → Public perception and acceptability is a key aspect, with CN being an analogue of an urban environment with highly sensitive facilities.

INSTRUMENT: RS3D, 3-Component compact, user-friendly seismometer.



Look at data on stationview.raspberryshake.org

Engaging Schools and Communities in Geothermal Monitoring

Case Studies from the DeepStor Research Infrastructure

Jerome Azzola, Judith Bremer, Katharina Schätzler, Florian Bauer, Thomas Kohl

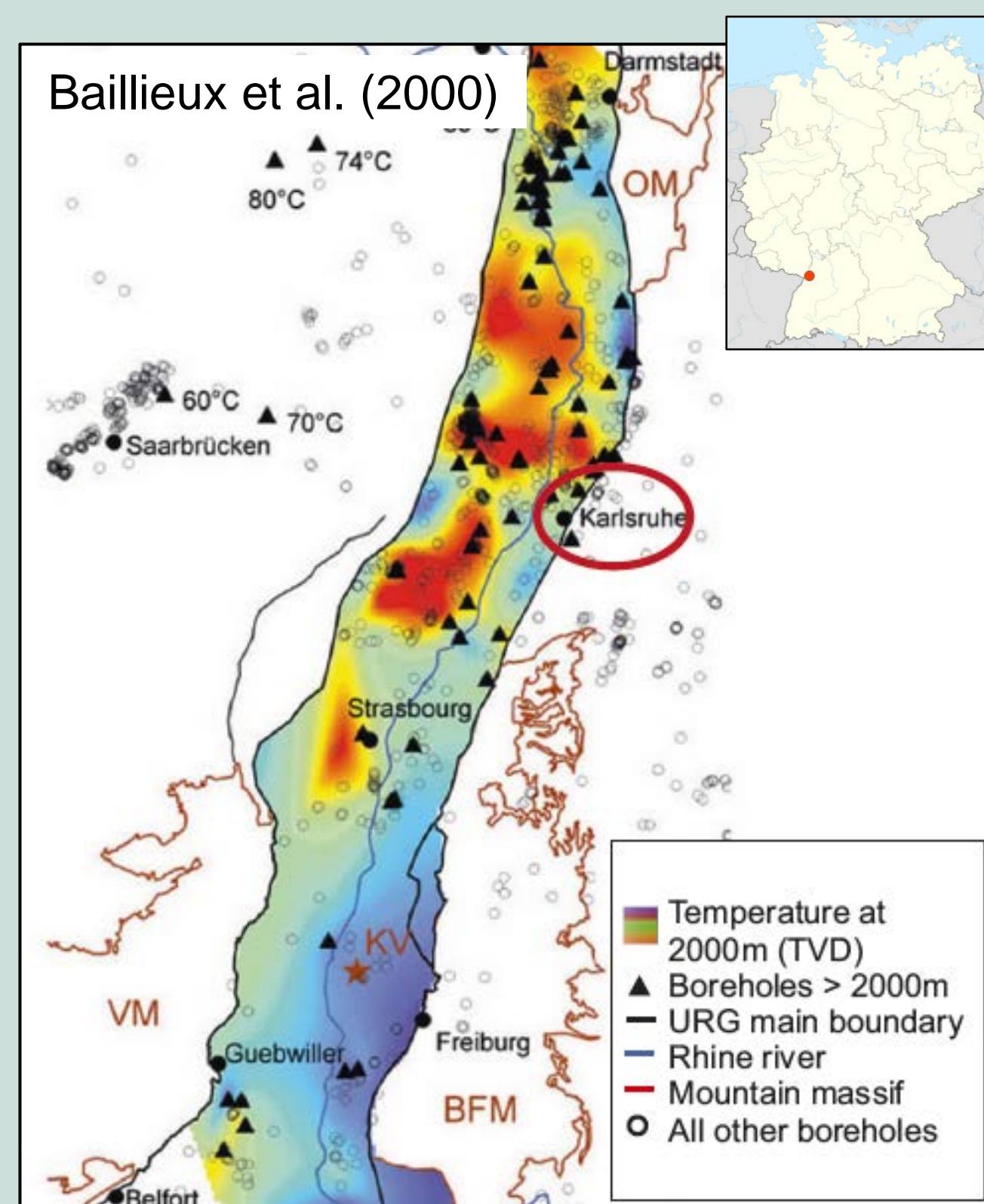
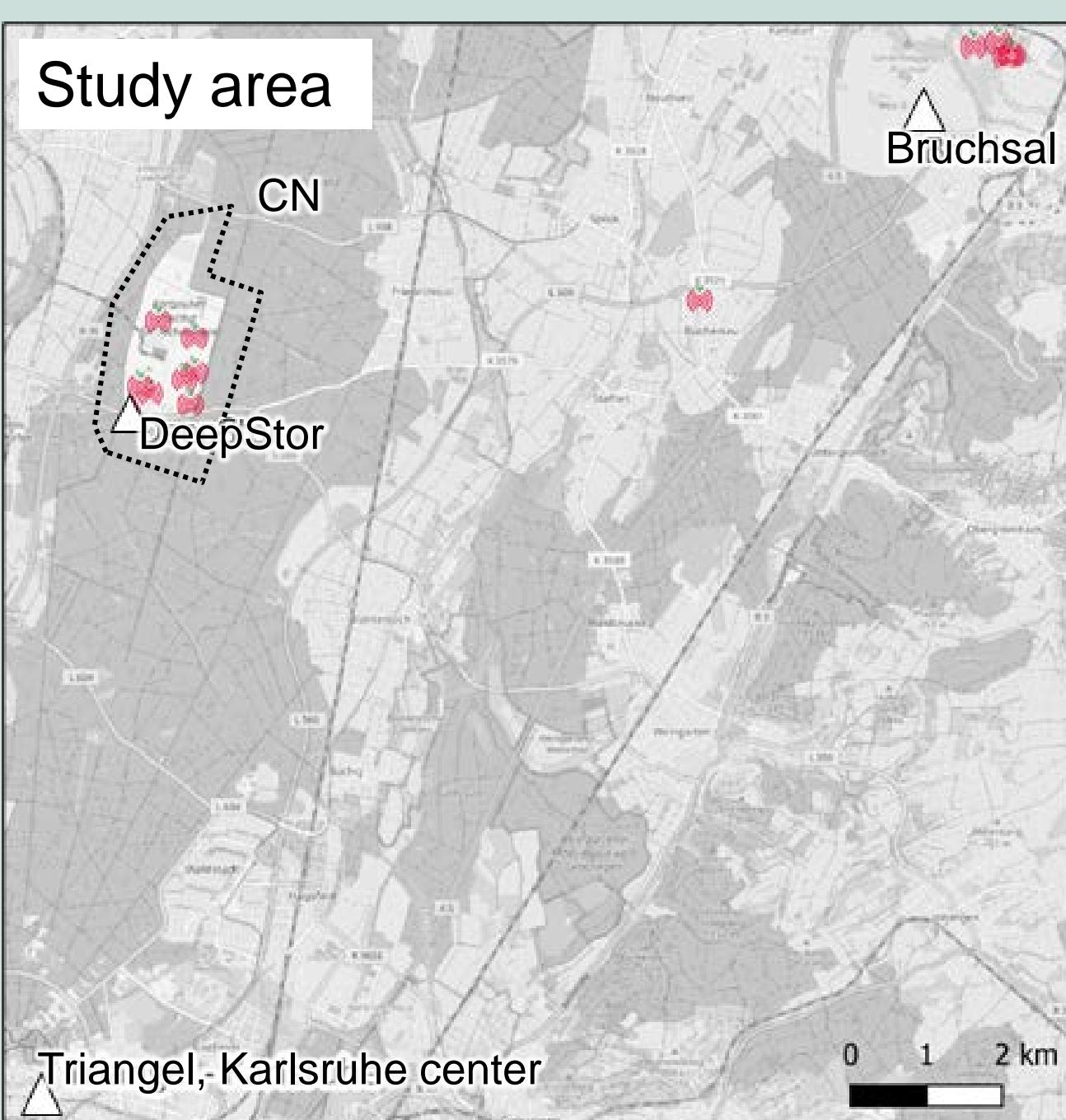
jerome.azzola@kit.edu, Karlsruhe Institute of Technology, Institute of Applied Geosciences, Geothermal Energy and Reservoir Technology

BACKGROUND: Geothermal projects can face negative public perception. **Induced seismicity** raises concerns and plays a crucial role in shaping social acceptance of geothermal projects.

POSSIBLE EXPLANATIONS: Insufficiently communicated scientific complexities, mistrust, ineffective dialogue, limited opportunities for public engagement...

POSSIBLE SOLUTIONS: Transparent exchange with citizens ; engage citizens in geothermal research and in the development of projects.

CONTEXT



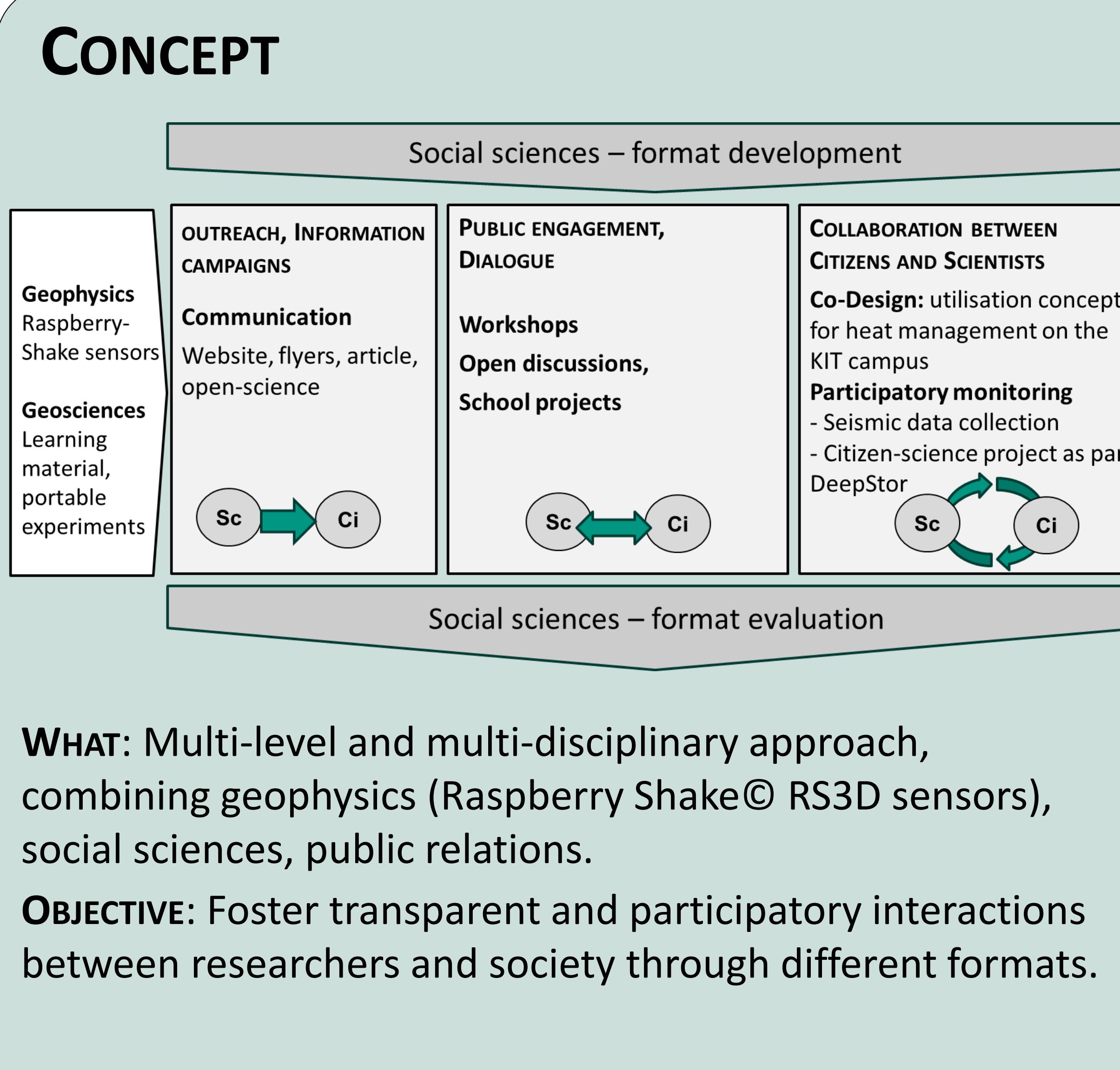
WHERE: Upper Rhine Graben, around the research infrastructure DeepStor, on the KIT Campus North (CN).

DEEPSTOR investigates the concept of aquifer thermal energy storage to address seasonal fluctuations in heat demand → Public perception and acceptability is a key aspect, with CN being an analogue of an urban environment with highly sensitive facilities.

INSTRUMENT: RS3D, 3-Component compact, user-friendly seismometer.



Look at data on stationview.raspberryshake.org

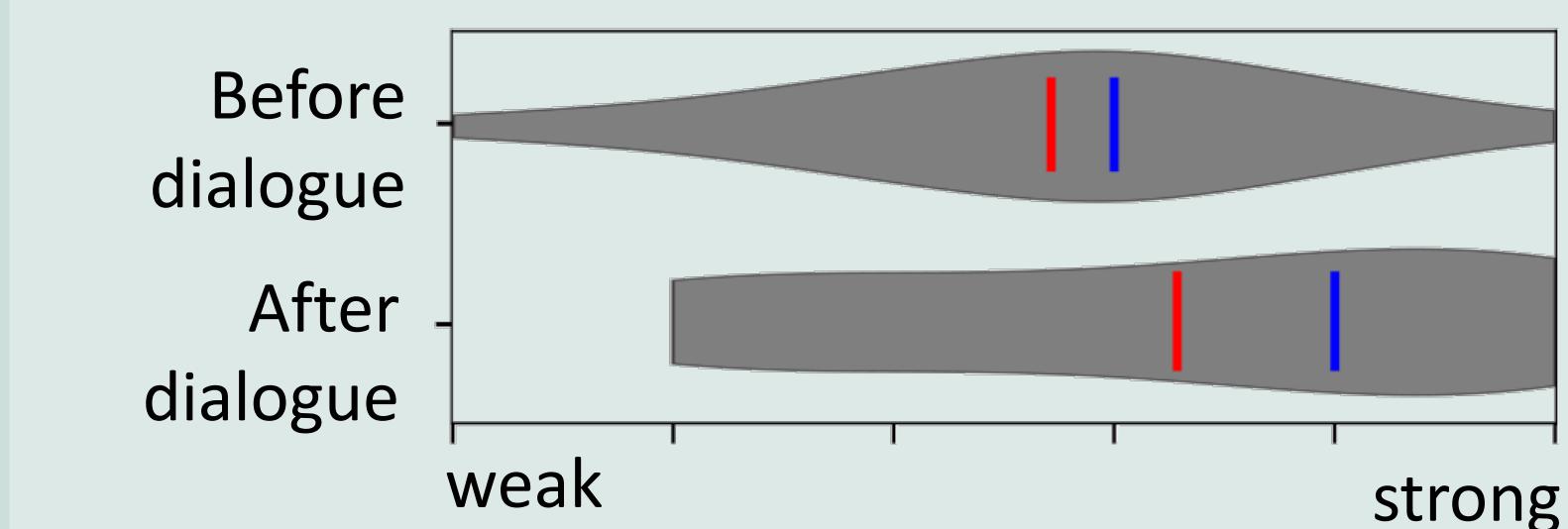


PUBLIC ENGAGEMENT, DIALOGUE

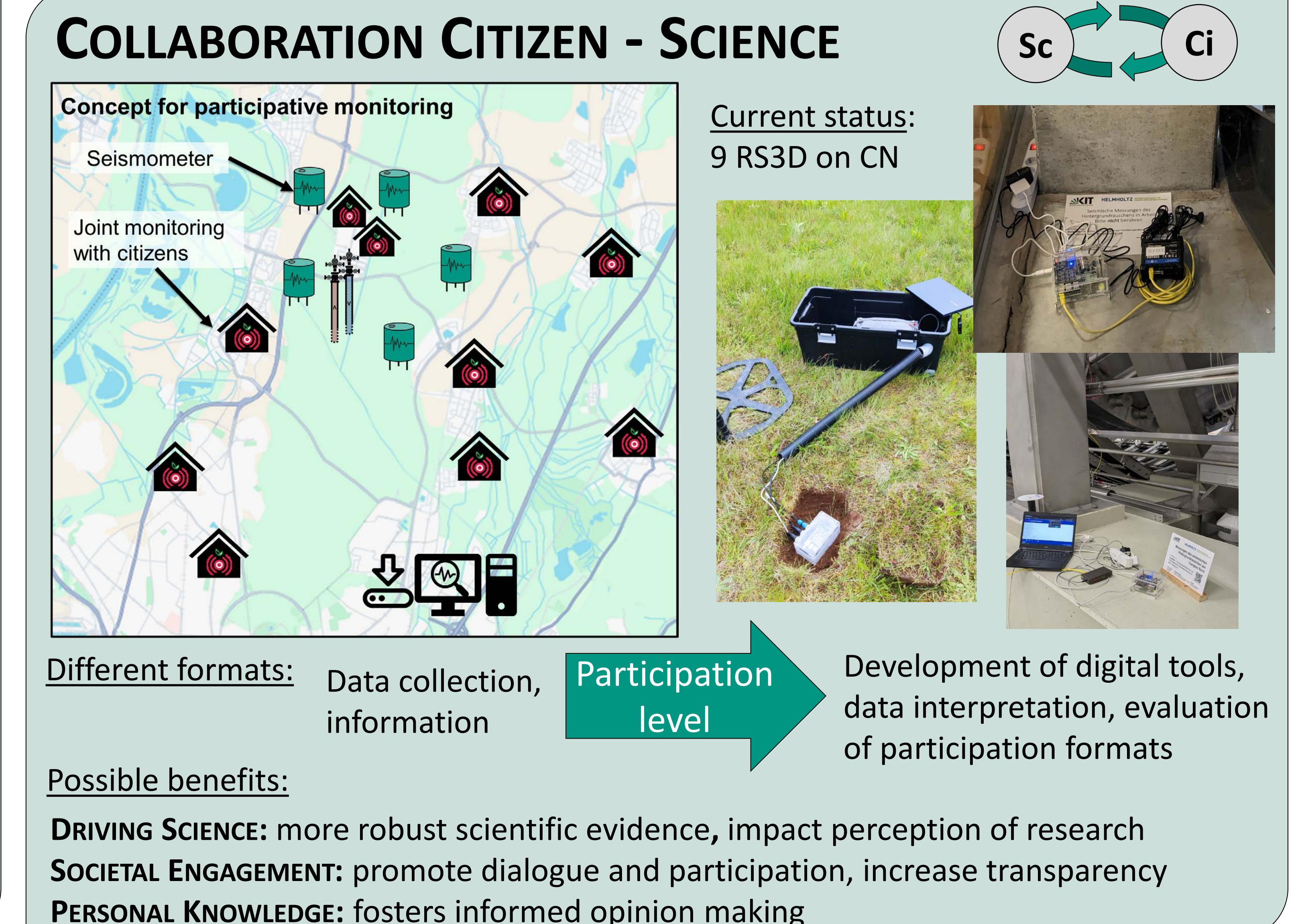
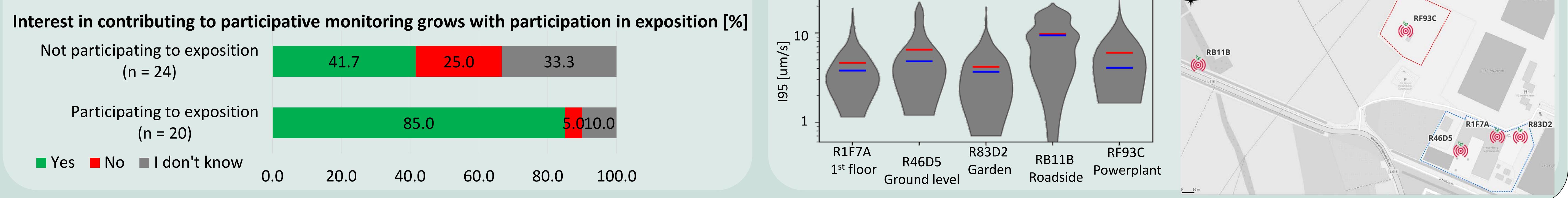
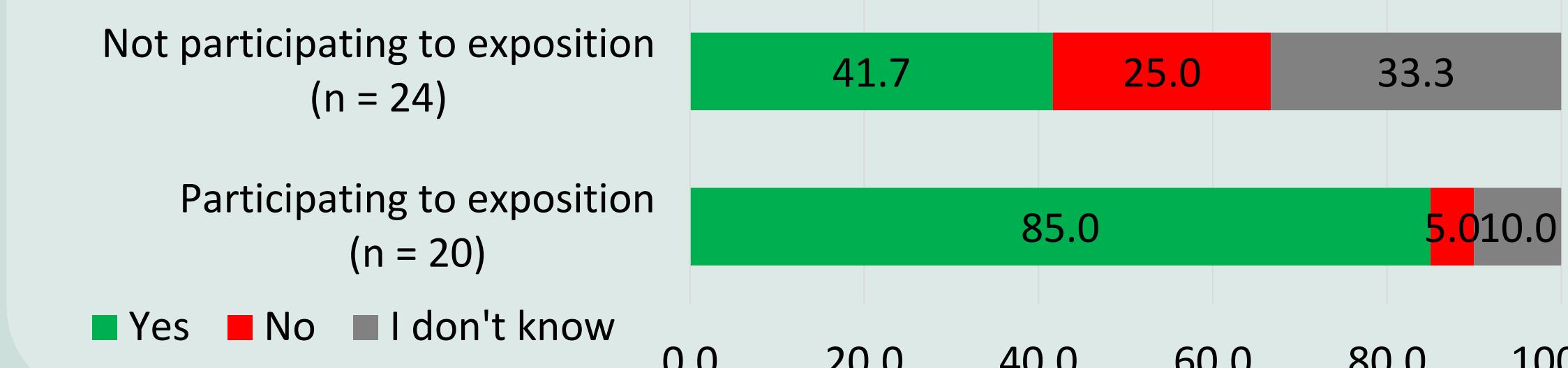
Example: Public exposition at Triangel (KA center)

- Focus on DeepStor research infrastructure
- Five booths present scientific topics in DeepStor
- Popularizing science: bringing science closer to the public
- Citizen involved in development + evaluation

Participants asked about their knowledge of deep geothermal energy



Interest in contributing to participative monitoring grows with participation in exposition [%]



Project evaluation with questionnaire

