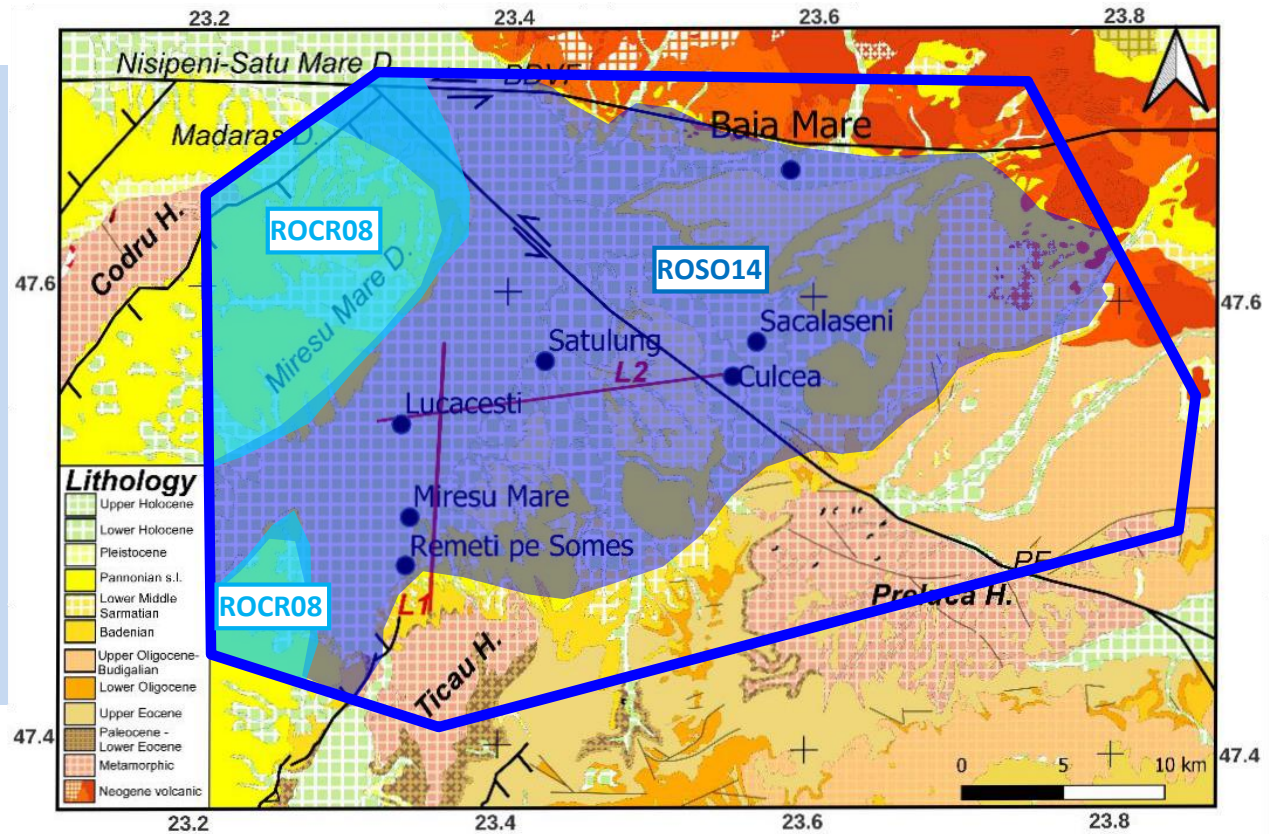


3D Conceptual Model of Paleogene-Neogene Hydrostructure (CMPNH) in the Baia Mare area, in connection with geothermal energy sources

Daniel Scradeanu, Mihaela Scradeanu

Geological map with the **two deep bodies of water**:

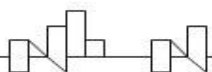
- **ROCR08** – the Arad-Oradea-Satu Mare area;
- **ROSO14** – the Baia Mare area.



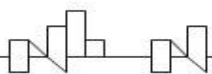
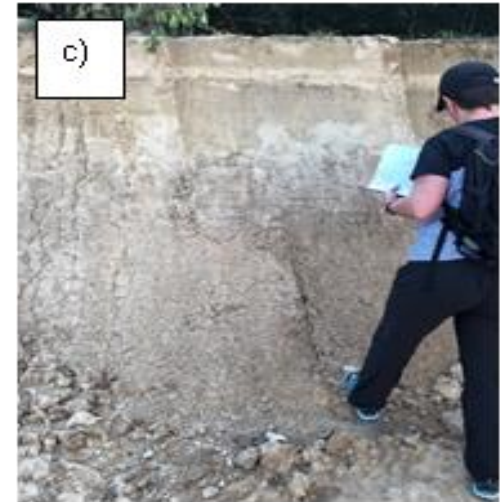
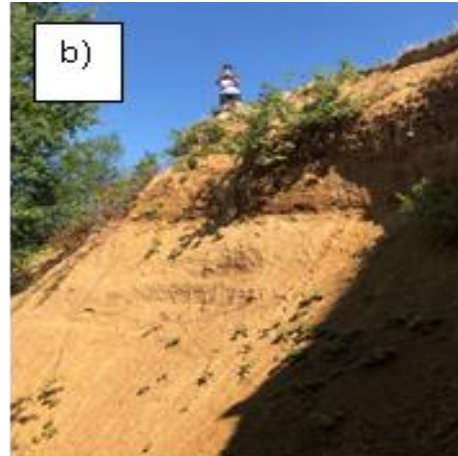
L1 and **L2** – seismic reflection lines; **blue line** – contour of **3D CMPNH**.

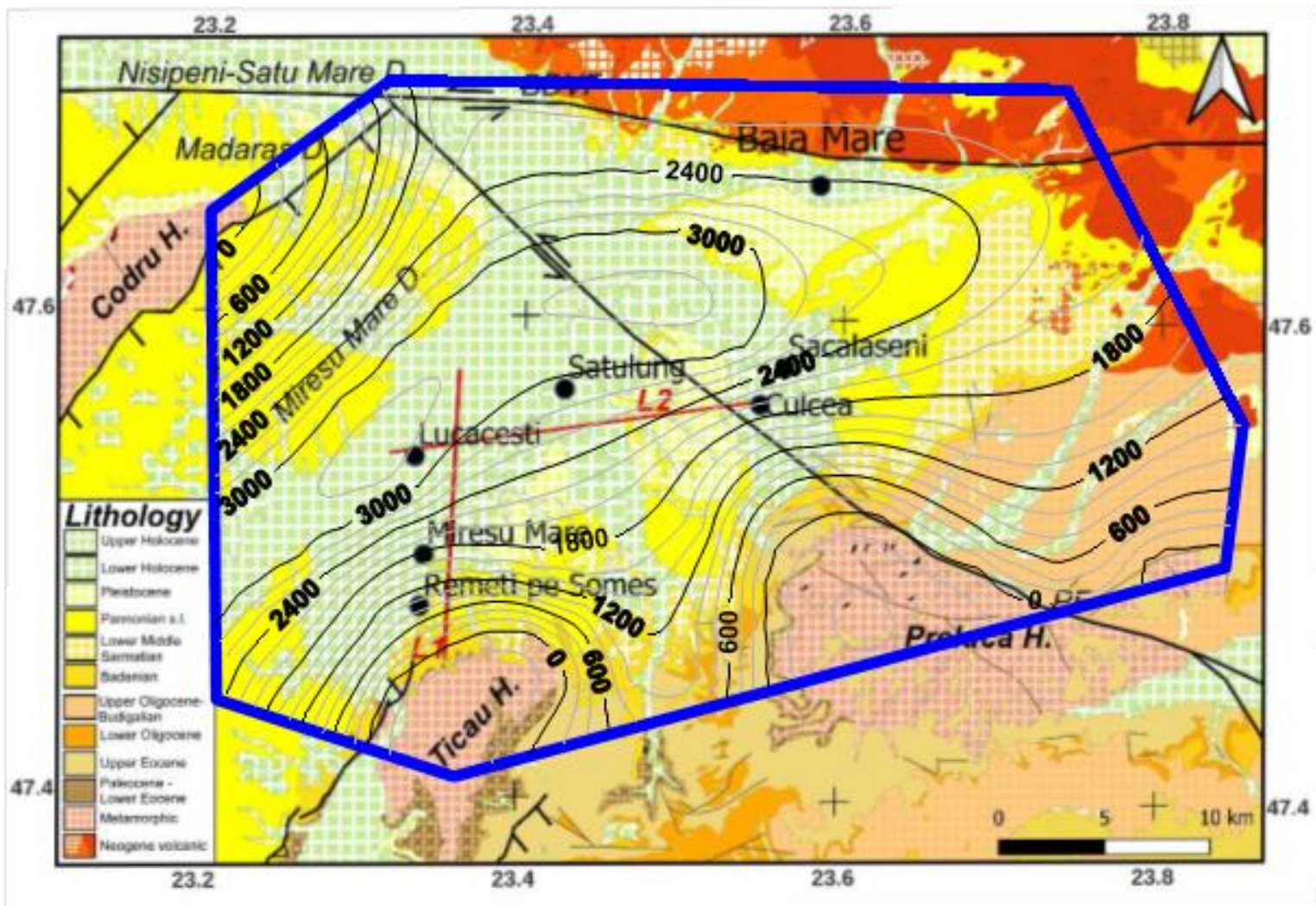
• Sources of maps:

- Geological Institute of Romania (geoportal)
- National Administration “Apele Romane”: <https://rowater.ro>

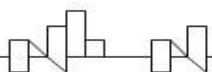


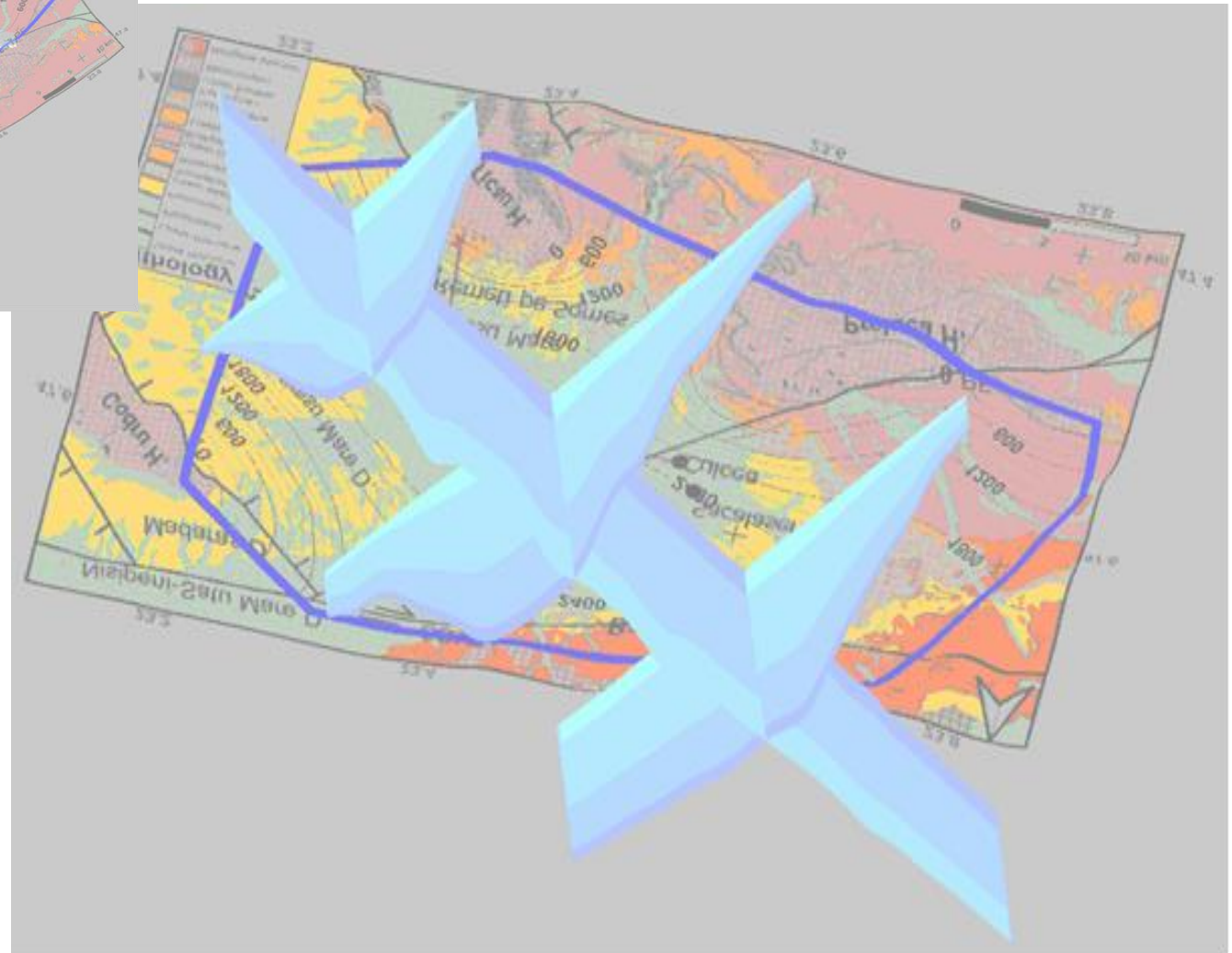
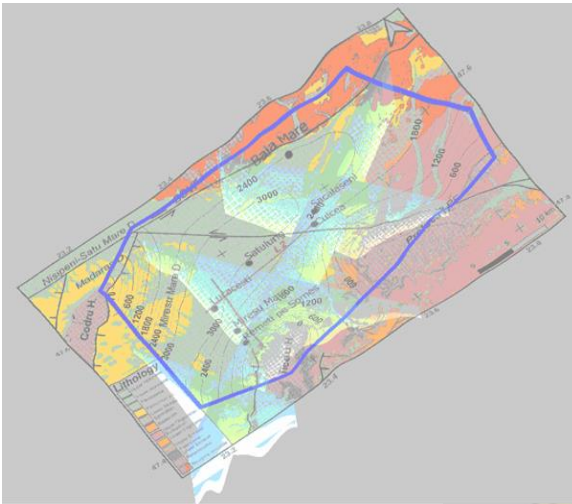
Outcrops with sedimentary deposits in the area of the 3D CMPNH



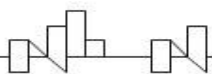


Geological map with the estimated thicknesses of the Paleogene-Neogene sedimentary deposits

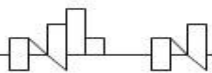
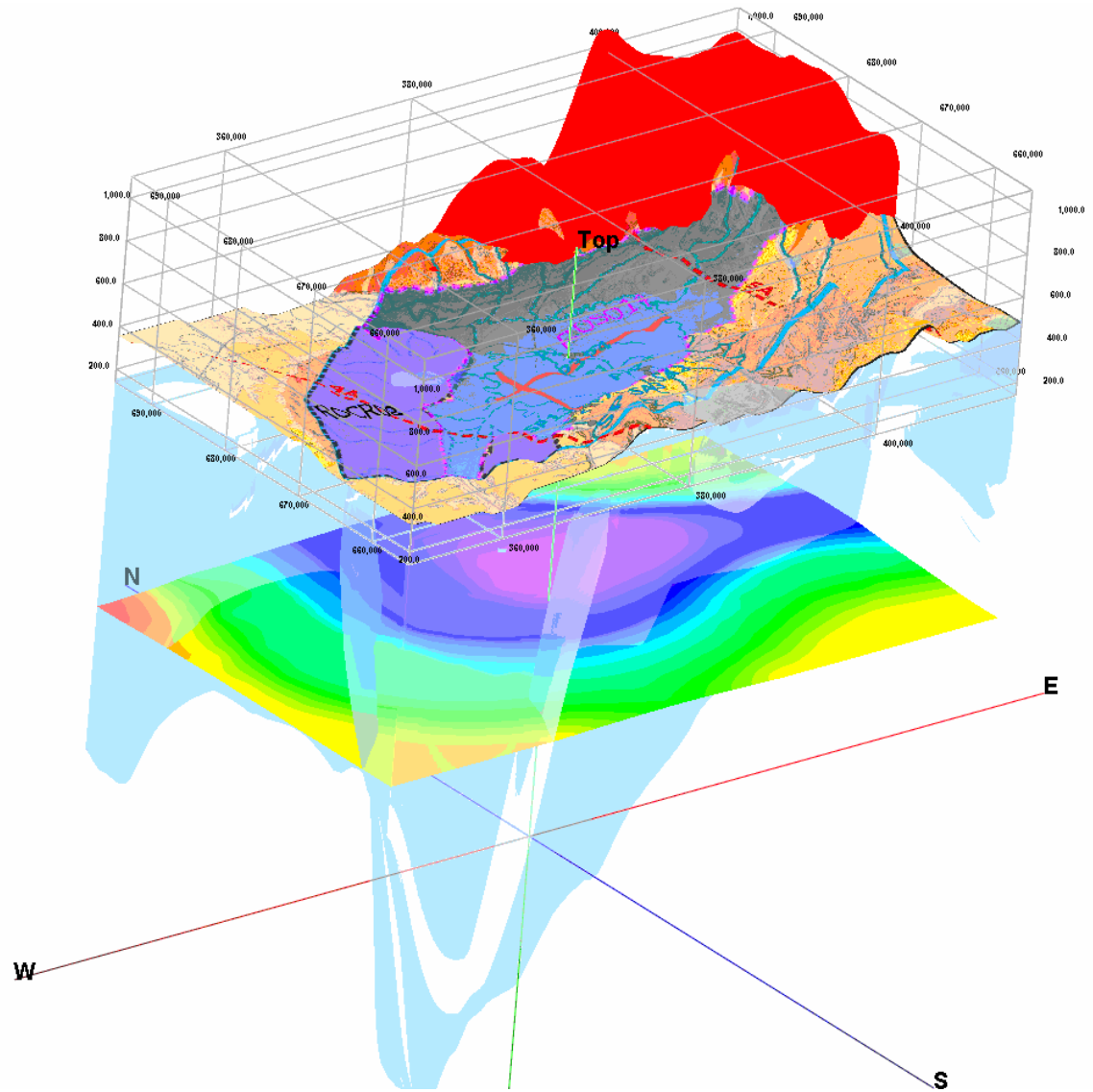


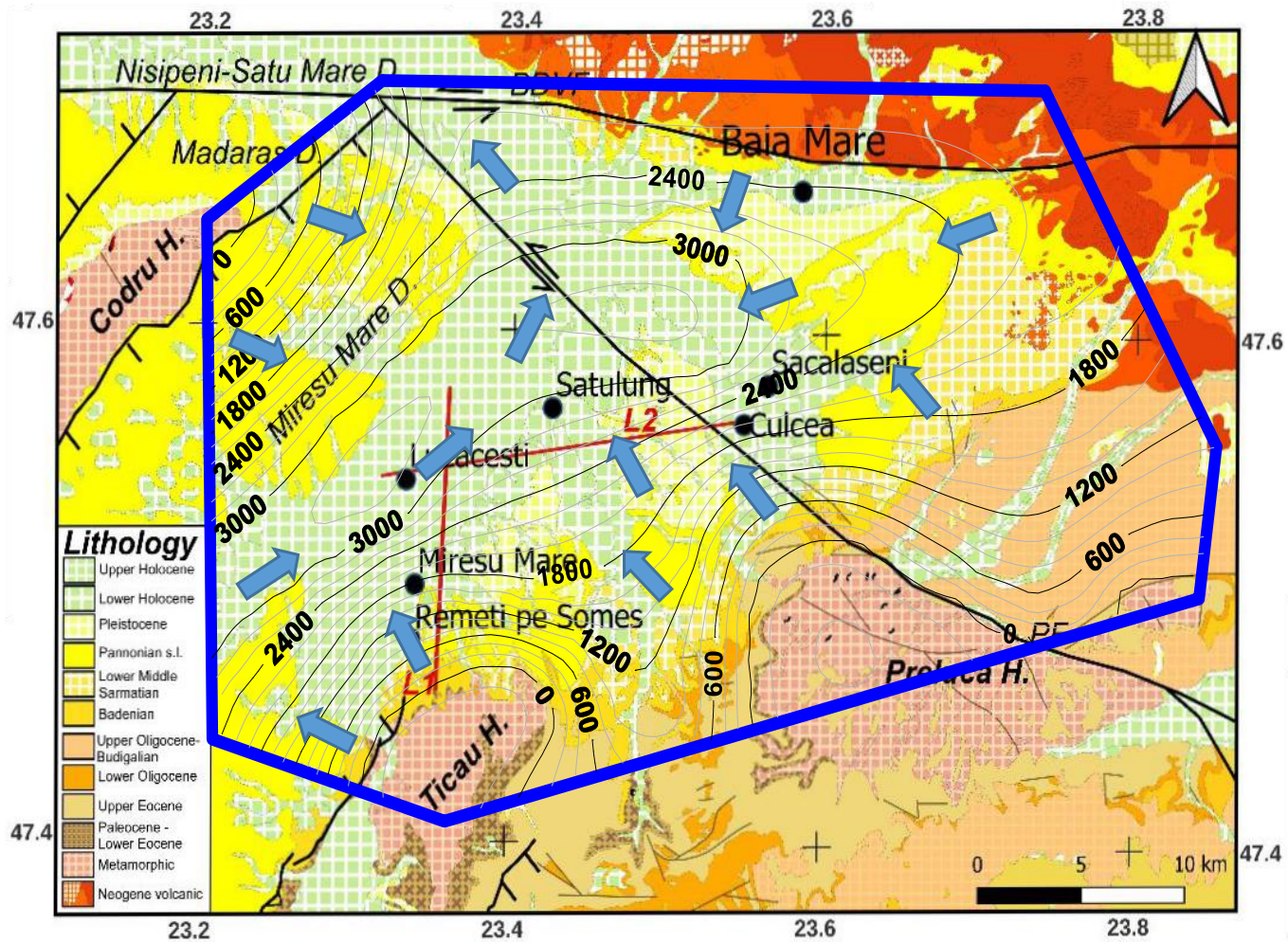


3D model of the thicknesses of **Paleogene-Neogene** sediments overlapped on the geological map of investigated area

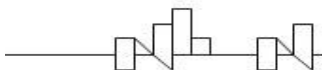


Distribution of temperatures at the depth of 3000 m with the 3D model of the thicknesses of Paleogene-Neogene sediments on top of it





Preliminary 2D model of the groundwater dynamic inside the Paleogene-Neogene sediments overlapped on the geological map of investigated area.



Acknowledgments

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