

POSSIBILITIES OF DIGITAL TERRAIN MODEL VISUALIZATION FOR GEOMORPHOLOGICAL FEATURES INTERPRETATION

Mendel
University
in Brno

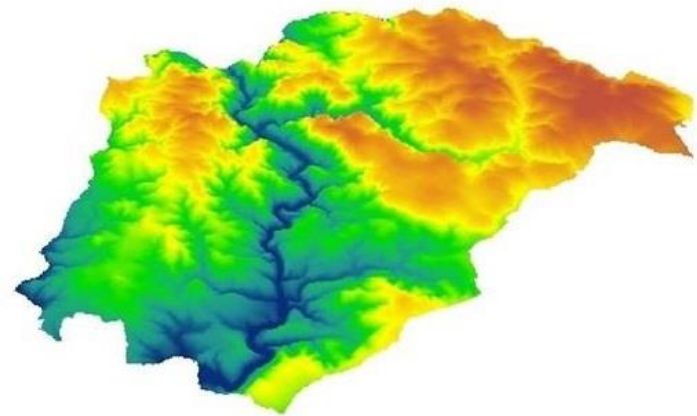


Faculty
of Forestry
and Wood
Technology

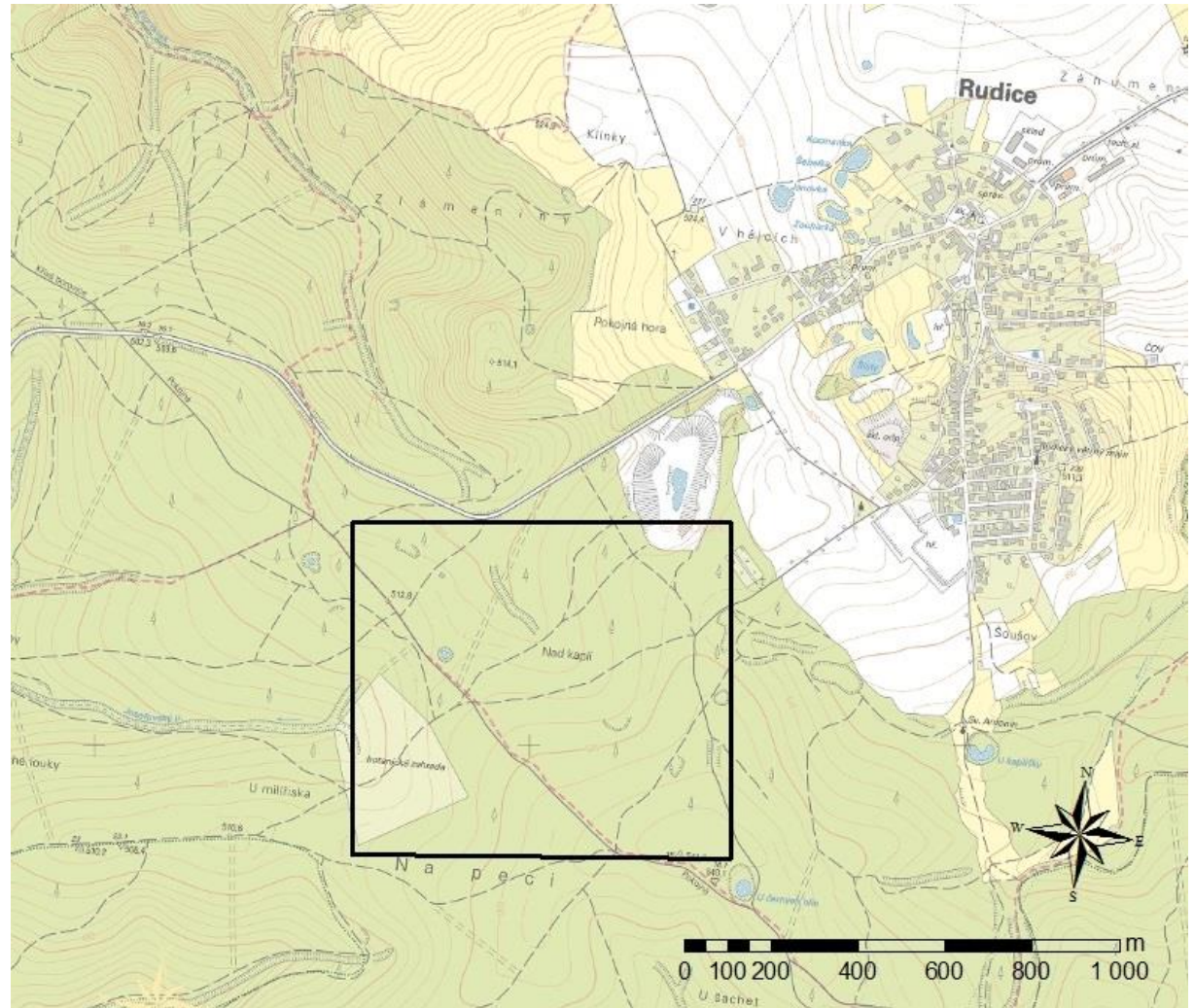
Ing. Marie Balková
doc. Mgr. Aleš Bajer, PhD.
Department of Geology and Pedology

DATA SOURCES, SOFTWARE

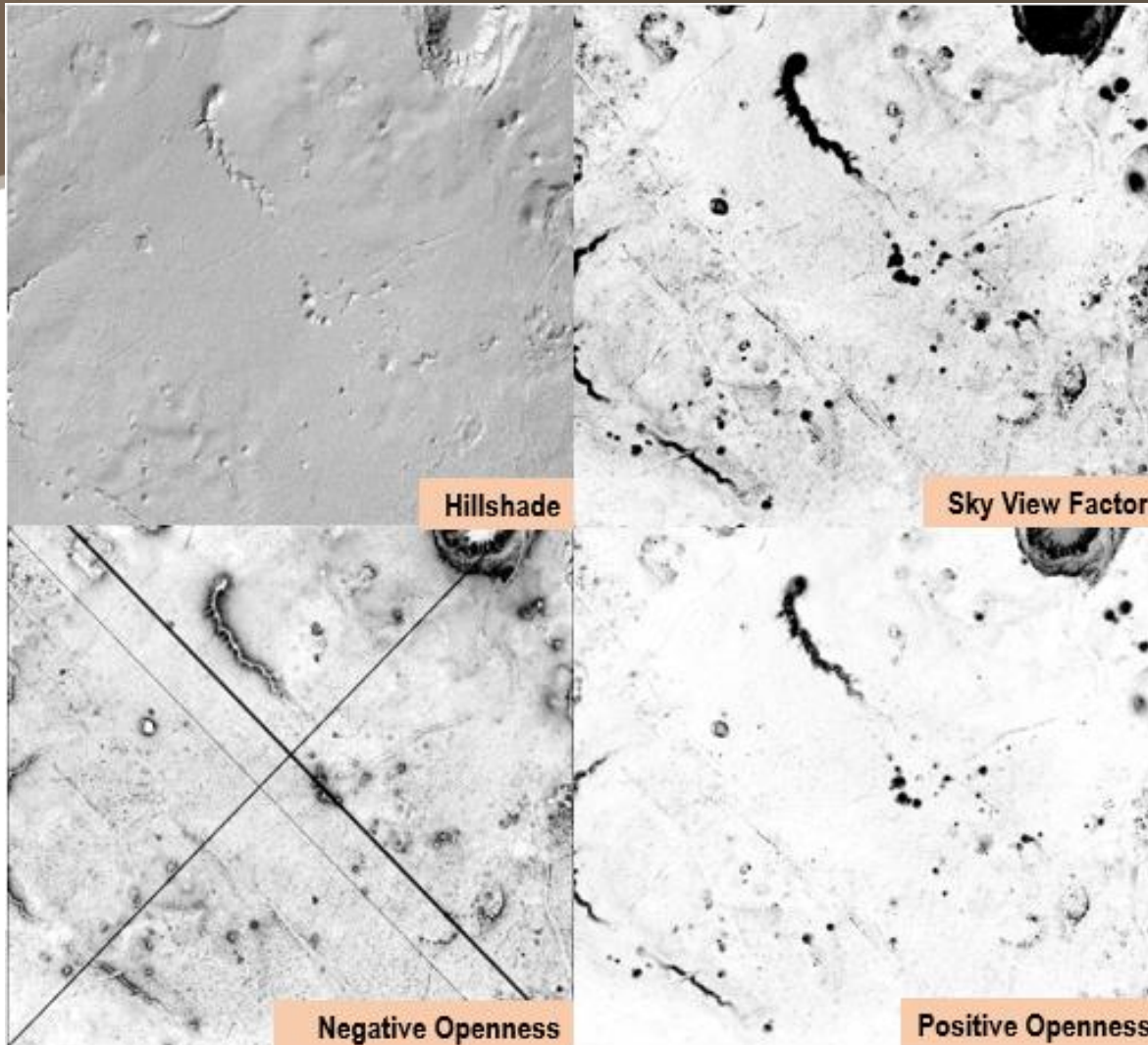
- Airborne Laser Scanning
- Digital Terrain Model of the Czech Republic of the 5th Generation
- ArcMap, SAGA GIS



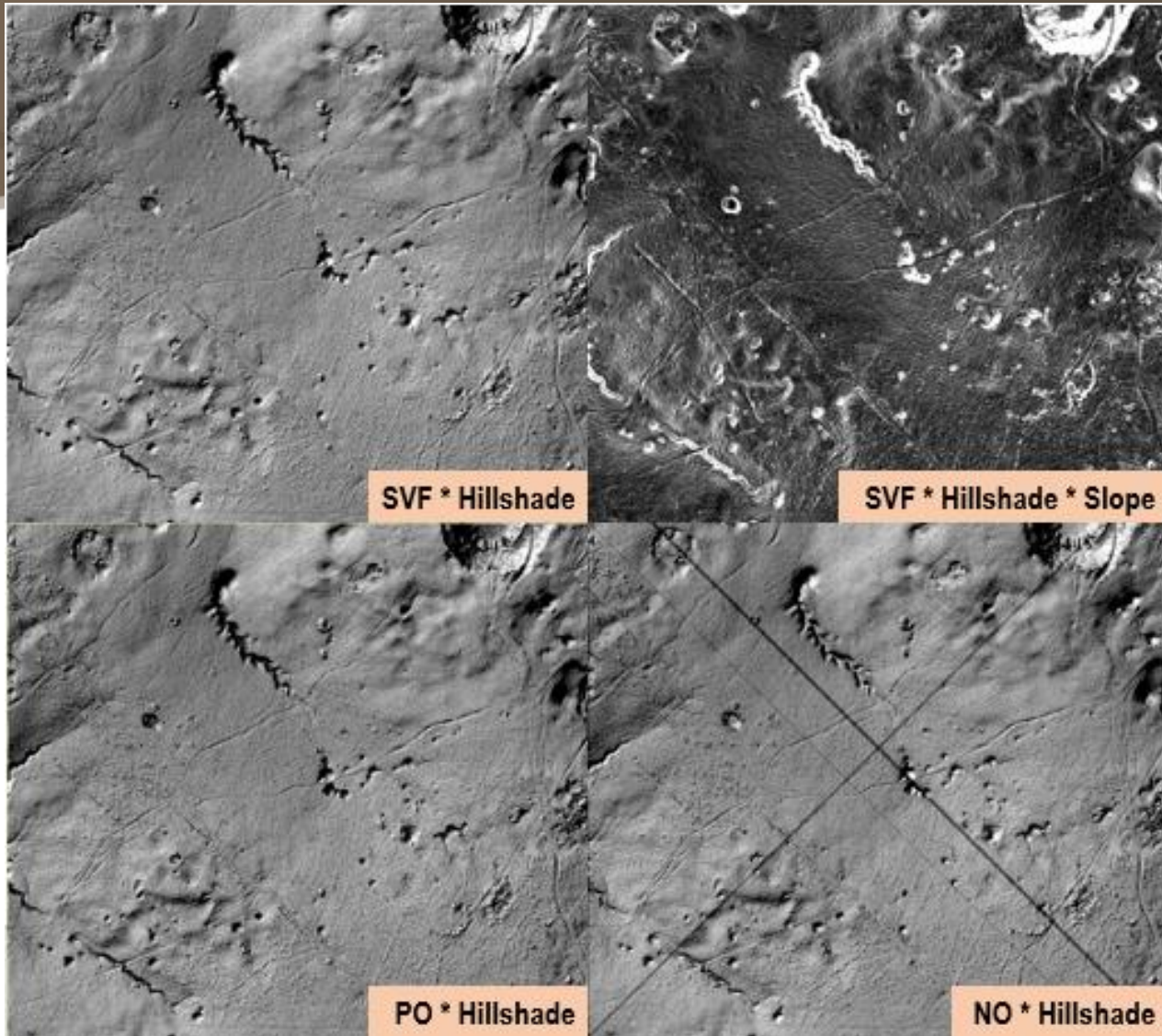
AREA OF INTEREST



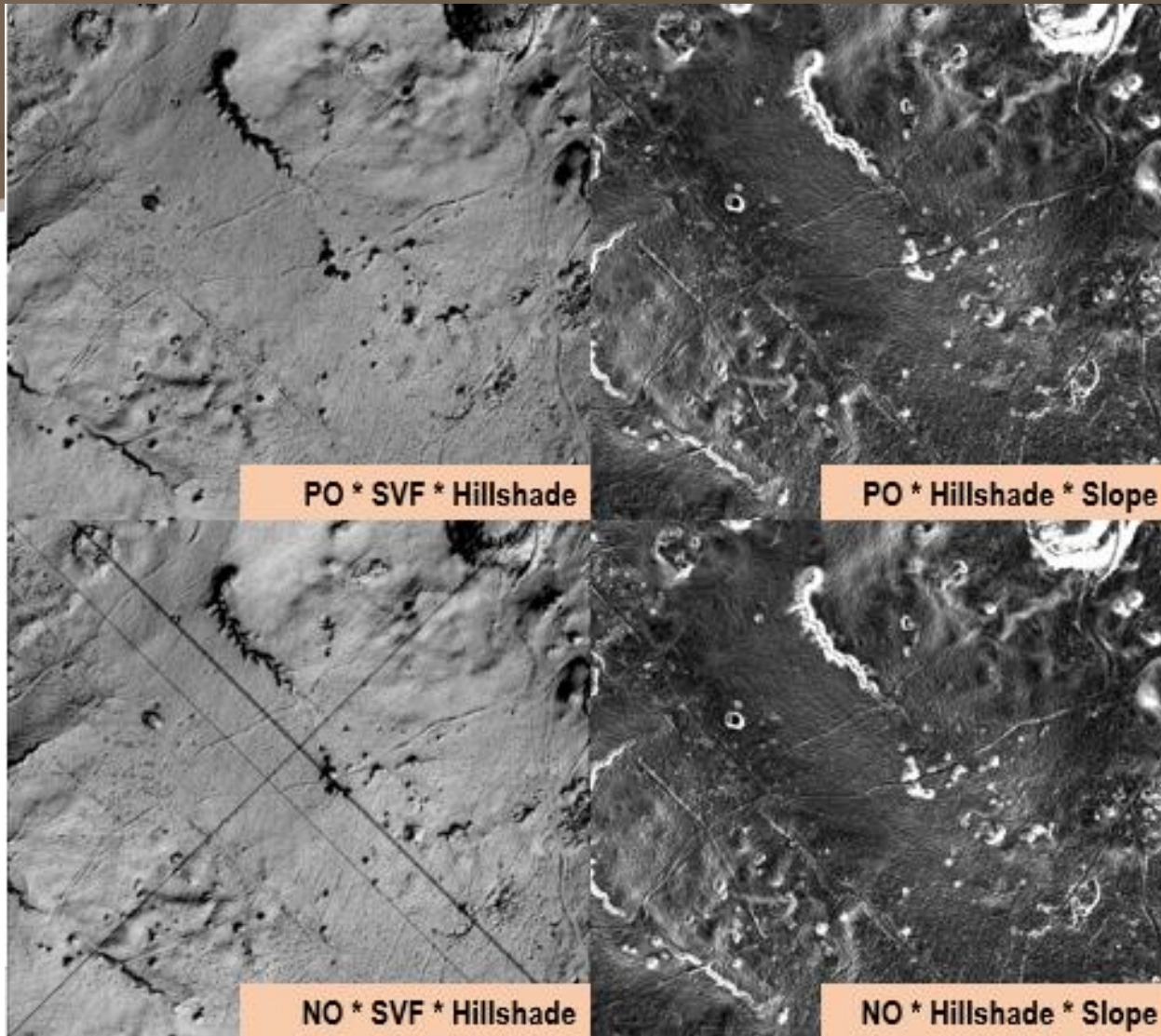
VIZUALIZATION METHODS



COMBINATION OF PREVIOUS METHODS



COMBINATION OF PREVIOUS METHODS



RESULTS

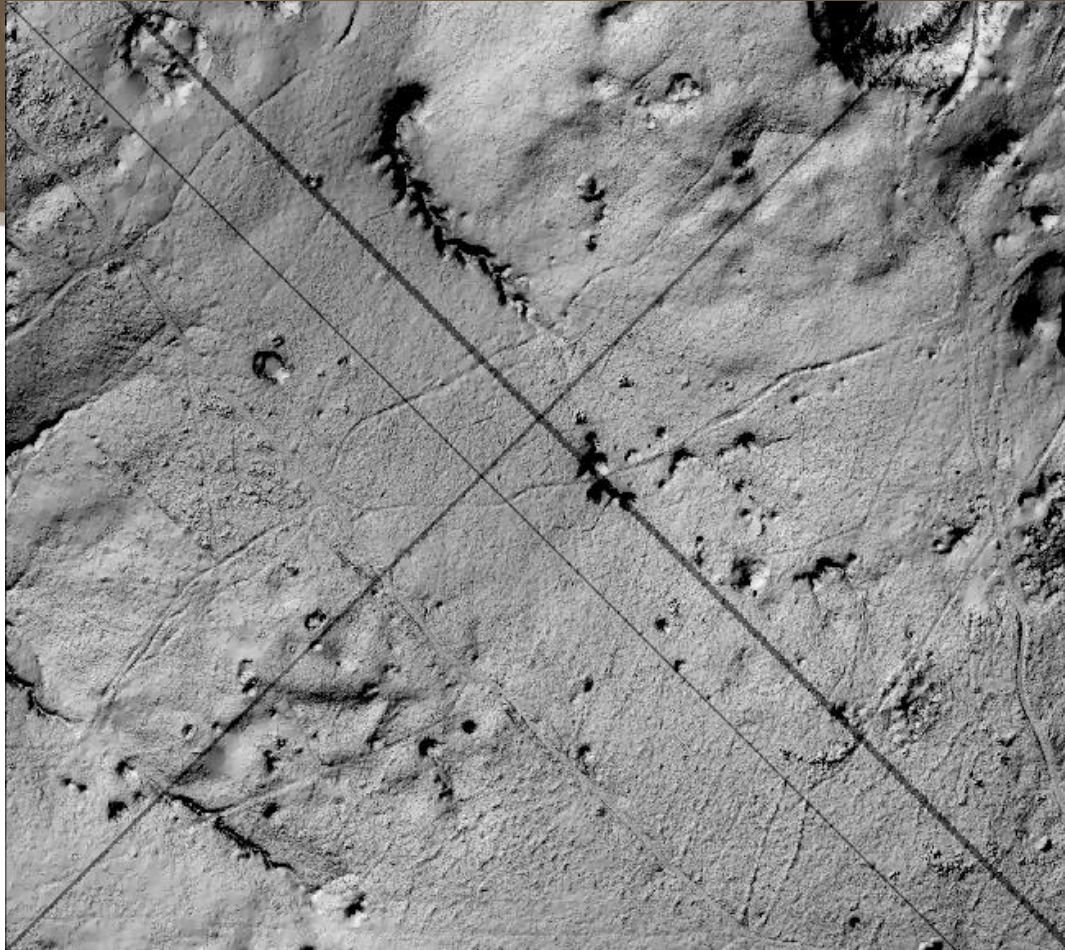


*Positive Openness*SVF*Hillshade*

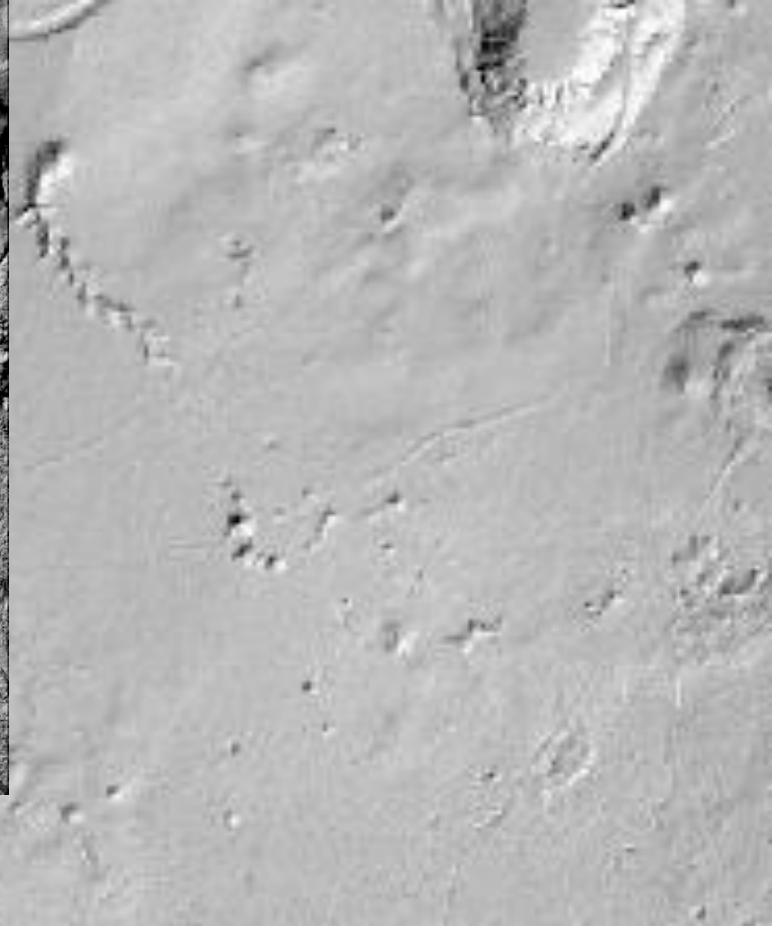


Hillshade

RESULTS

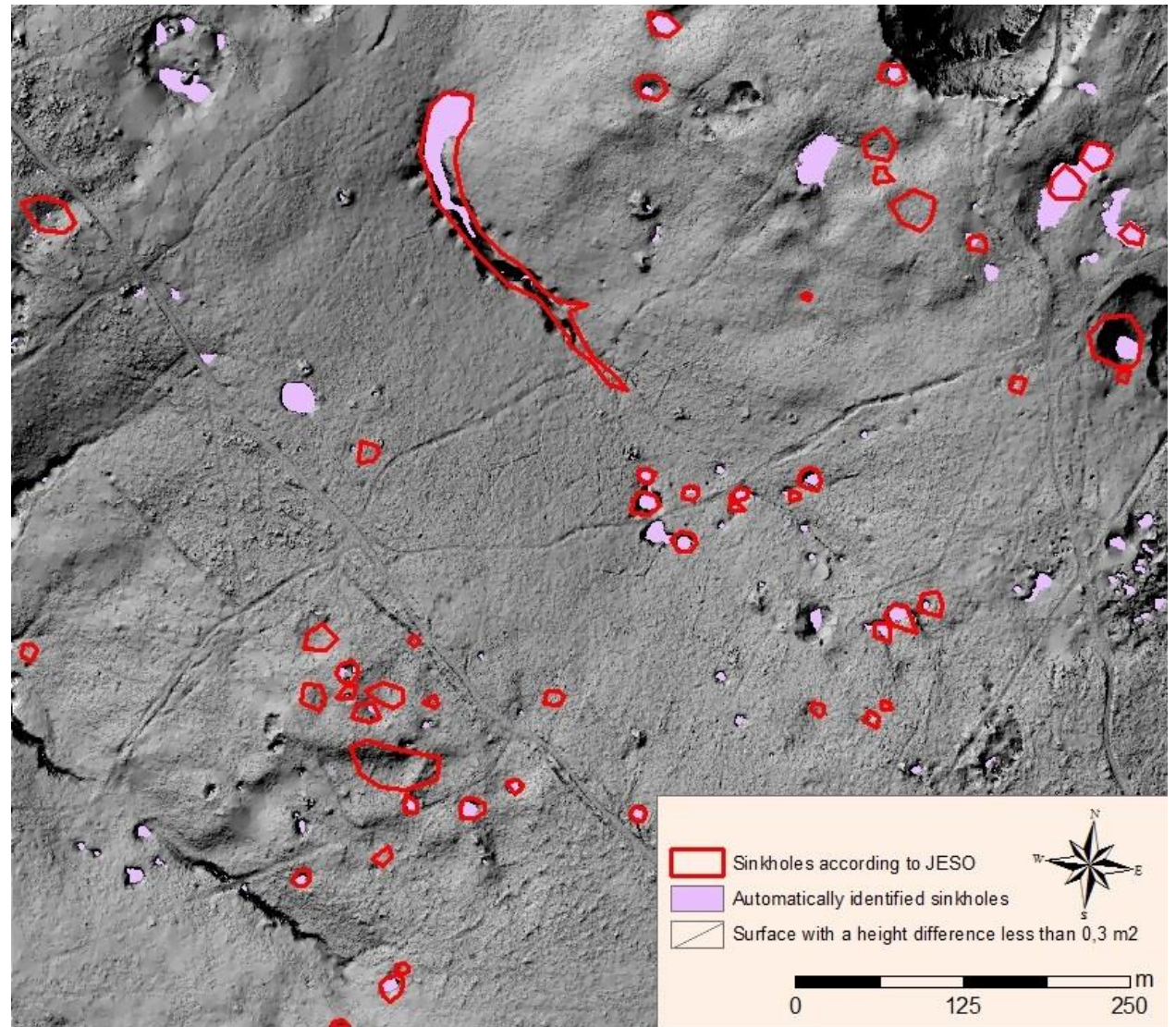


*Negative Openness*SVF*Hillshade*



Hillshade

EXAMPLE OF USE



EXAMPLES OF USE IN RECREATION

- Sublayer of attractive localities mapserves
- New educational instruments – boards, interactive elements, games in terrain
- 3D models of hiking trails, singletracks, physical condition test
- Trail network optimization



A decorative graphic on the left side of the slide features a vertical lime green stem with several thin, curved branches extending upwards and to the right. These branches are adorned with small, dark green leaves and two white, multi-petaled flowers. A black vine with a spiral pattern and a larger, curved branch also extends from the bottom left towards the center. The background of the slide is a dark brown color with a pattern of light brown circles and squares, and a large, faint, light brown spiral graphic in the upper right quadrant.

THANKS FOR YOUR ATTENTION!

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