

The geodiversity mapping of Hungary

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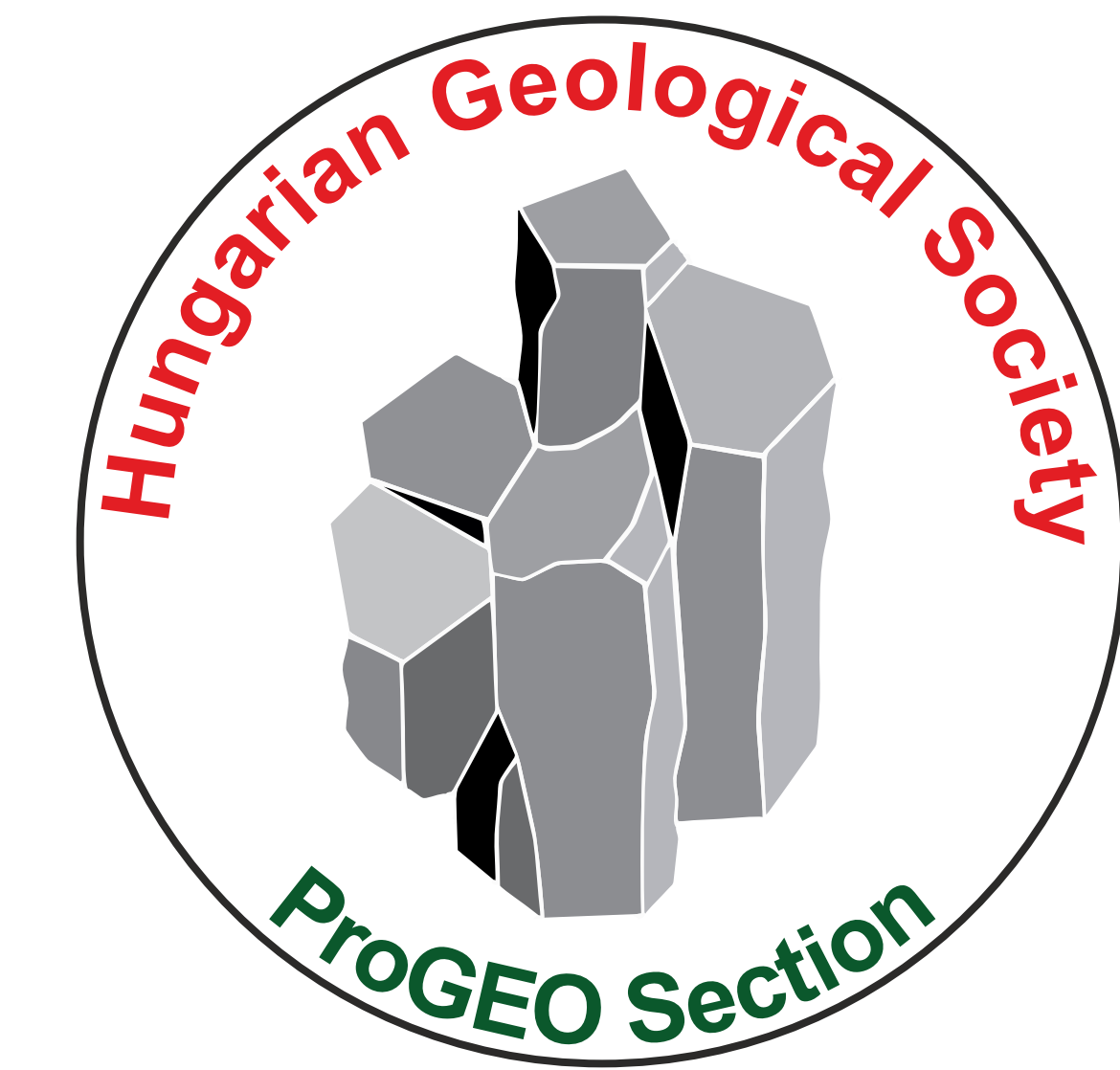
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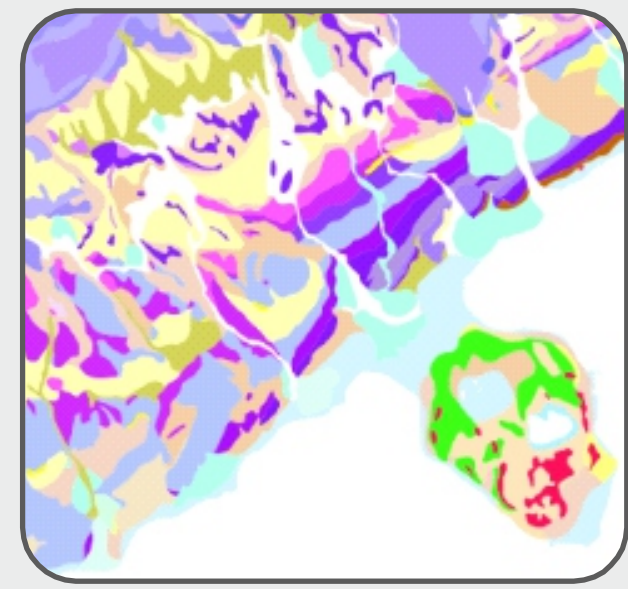
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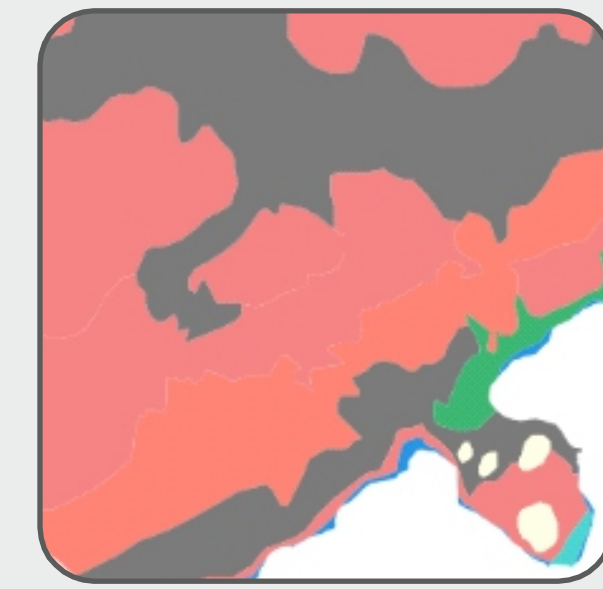
Calculating geodiversity index values over a 2*2 km grid

1. Counting different object types in each cell

Country-specific data

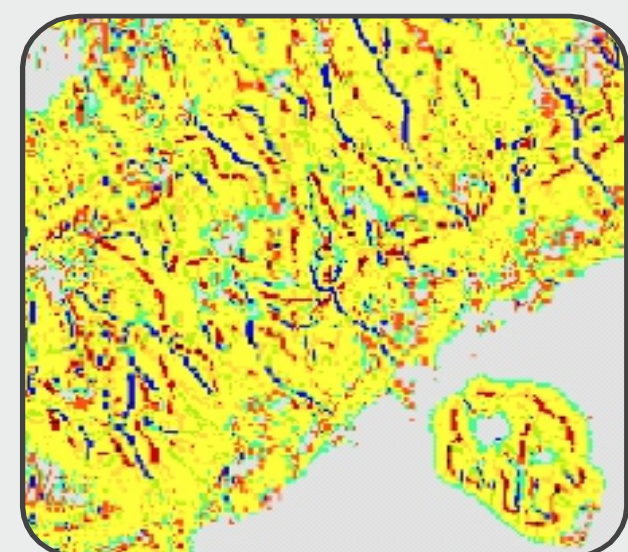


Geology
100k map



Soils
Agrotopo 100k

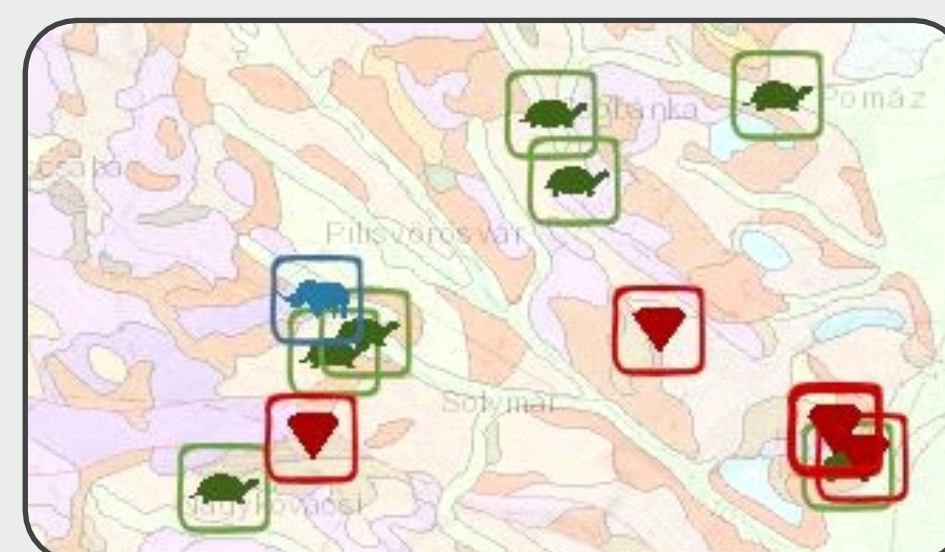
Universal data



Geomorphology I.
Relief: MERIT
with geomorphons



Geomorphology II.
Hydrogr.: derived from
MERIT, Strahler values



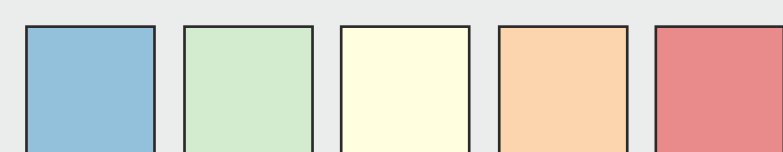
Mineral & fossil occurrences
EGDI & Paleobiology Dataset

2. Normalising subindex values in each cell

$$cell_{norm} = cell / cell_{max}$$

3. Summing normalised subindex values

4. Using Jenks' Natural Breaks method for classification - 5 categories



Methodological background:

Pál, M., & Albert, G. (2021). Refinement proposals for geodiversity assessment—a case study in the Bakony–Balaton UNESCO Global Geopark, Hungary. ISPRS International Journal of Geo-Information, 10(8). <https://doi.org/10.3390/ijgi10080566>

Pereira, D. I., Pereira, P., Briha, J., & Santos, L. (2013). Geodiversity assessment of Paraná State (Brazil): An innovative approach. Environmental Management, 52(3), 541–552. <https://doi.org/10.1007/s00267-013-0100-2>

