Radon in Quaternary sediments covering the geological basement with contrasting radon index

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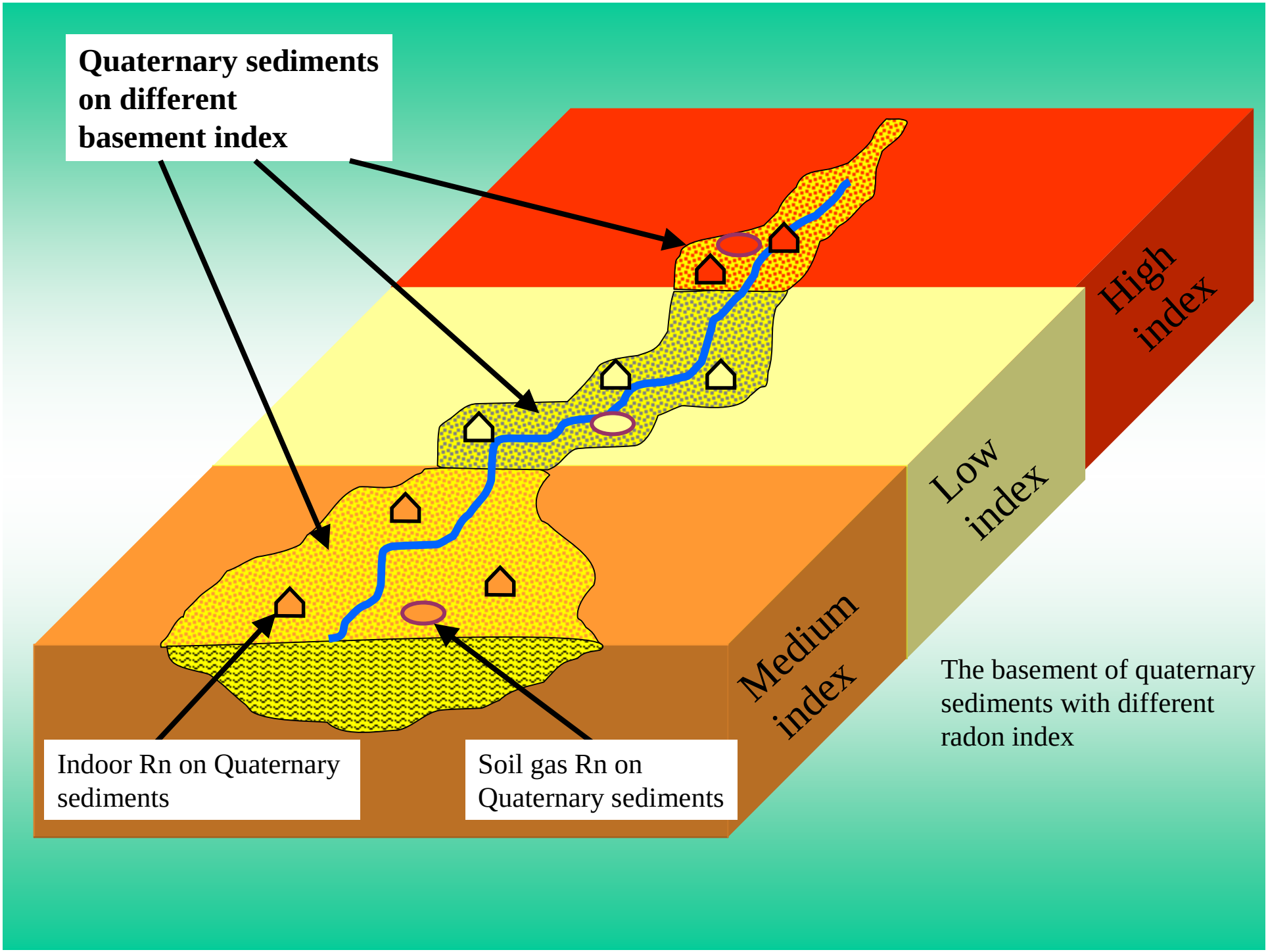
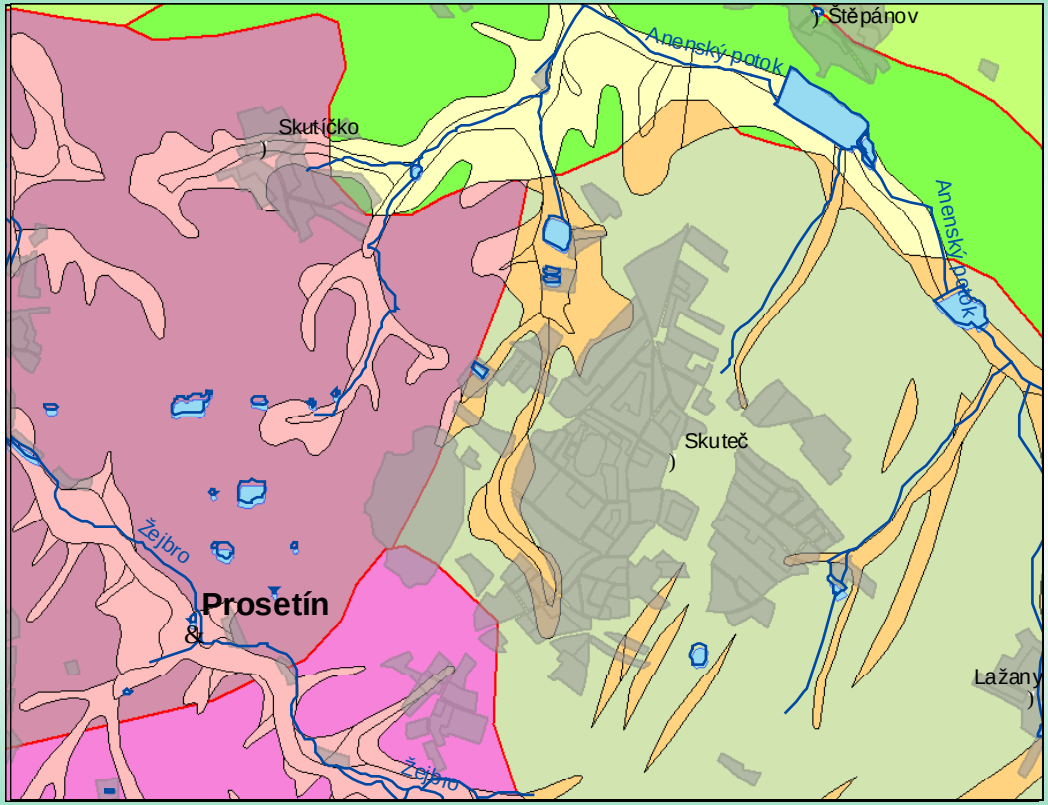
Metodology

- Intermediate radon category:
  - » Intended for Quaternary sediments
  - » 60% of villages
- Quaternary sediments:
  - » inhomogenous
  - » the influence of lateral transport (drift of the rock fragments)

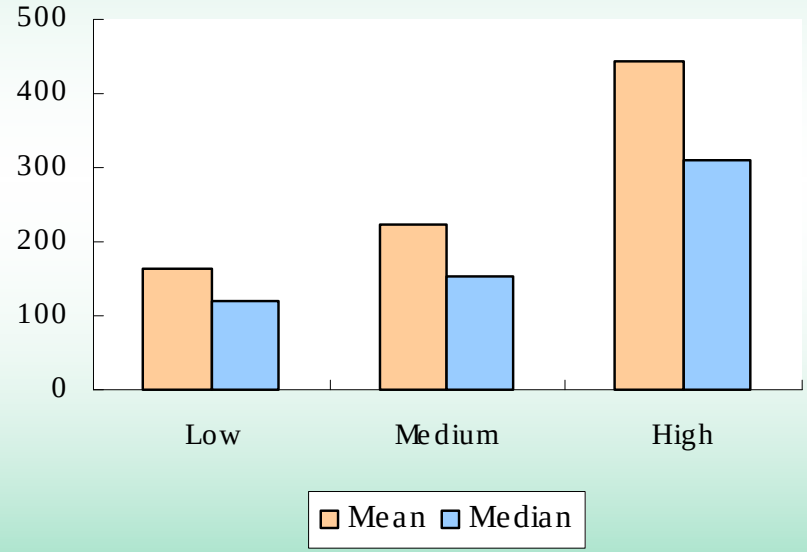

Quaternary sediments on different basement index
High index
Low index
Medium index
Indoor Rn on Quaternary sediments
Soil gas Rn on Quaternary sediments
The basement of quaternary sediments with different radon index

The aim of the research

- Comparison of soil gas radon measured on Quaternary sediments with the indoor radon
  - » Throughout the village
  - » Quaternary sediments only
- The distribution of intermediate radon index into three cathegories

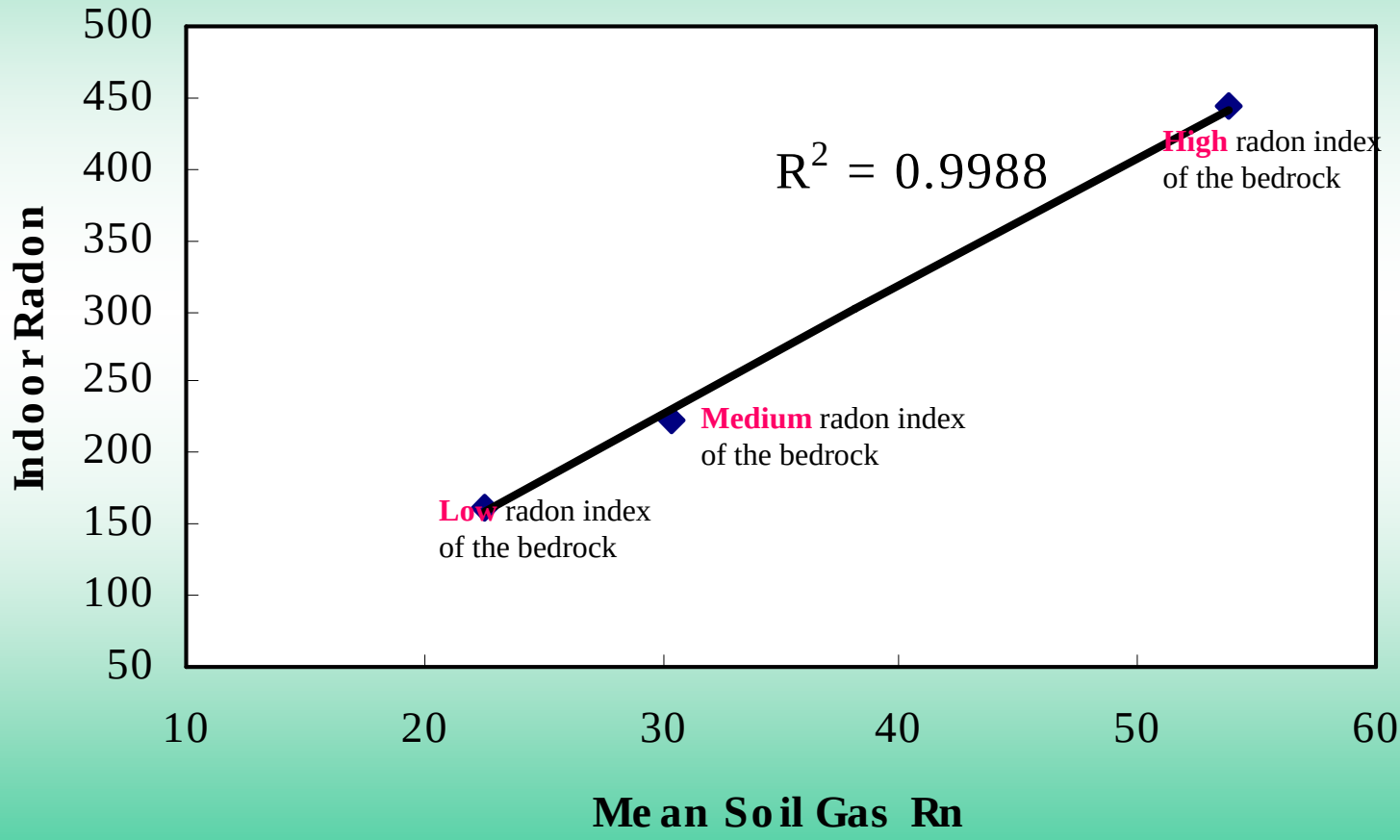

Štěpánov
Anenský potok
Skutíčko
Anenský potok
Skuteč
Žejbro
Prosetín
Lažany
Žejbro

Radon measured on Quaternary sediments: Indoor Rn

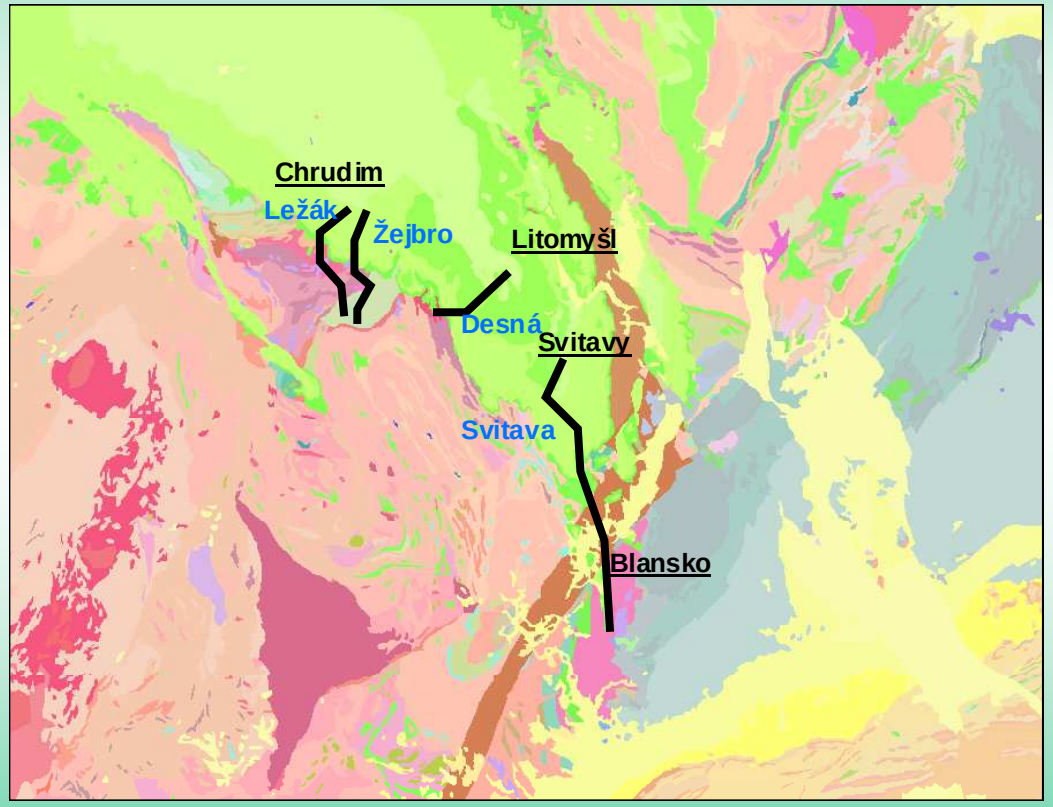


General scale: all the measured data

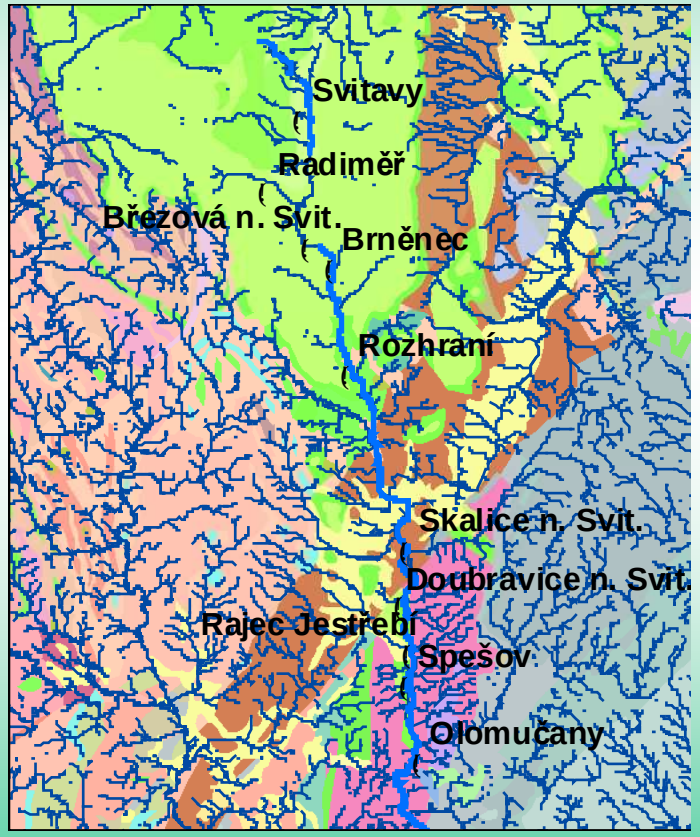
Indoor- Soil Gas Radon relationship



Localisation



Profile along Svitava



Cretaceous sediments

Orthogneisses and paragneisses

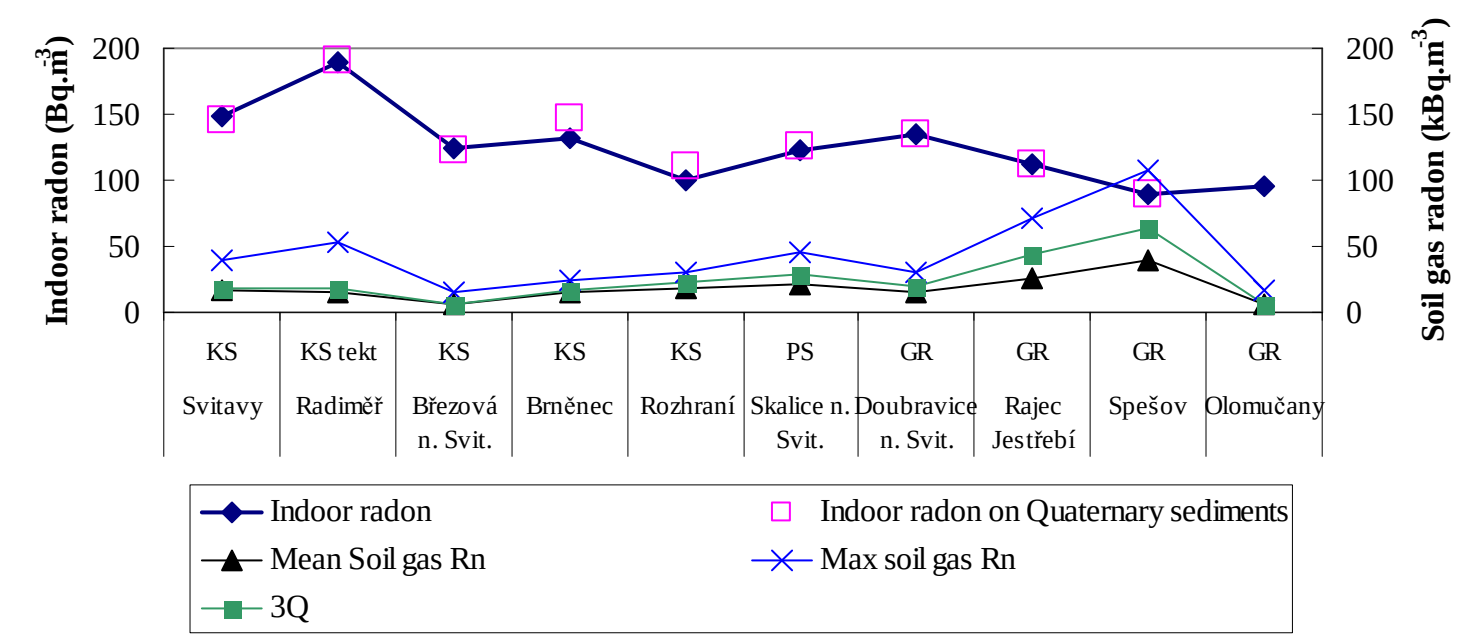
Permocarboniferous sediments

Carbon: metasediments

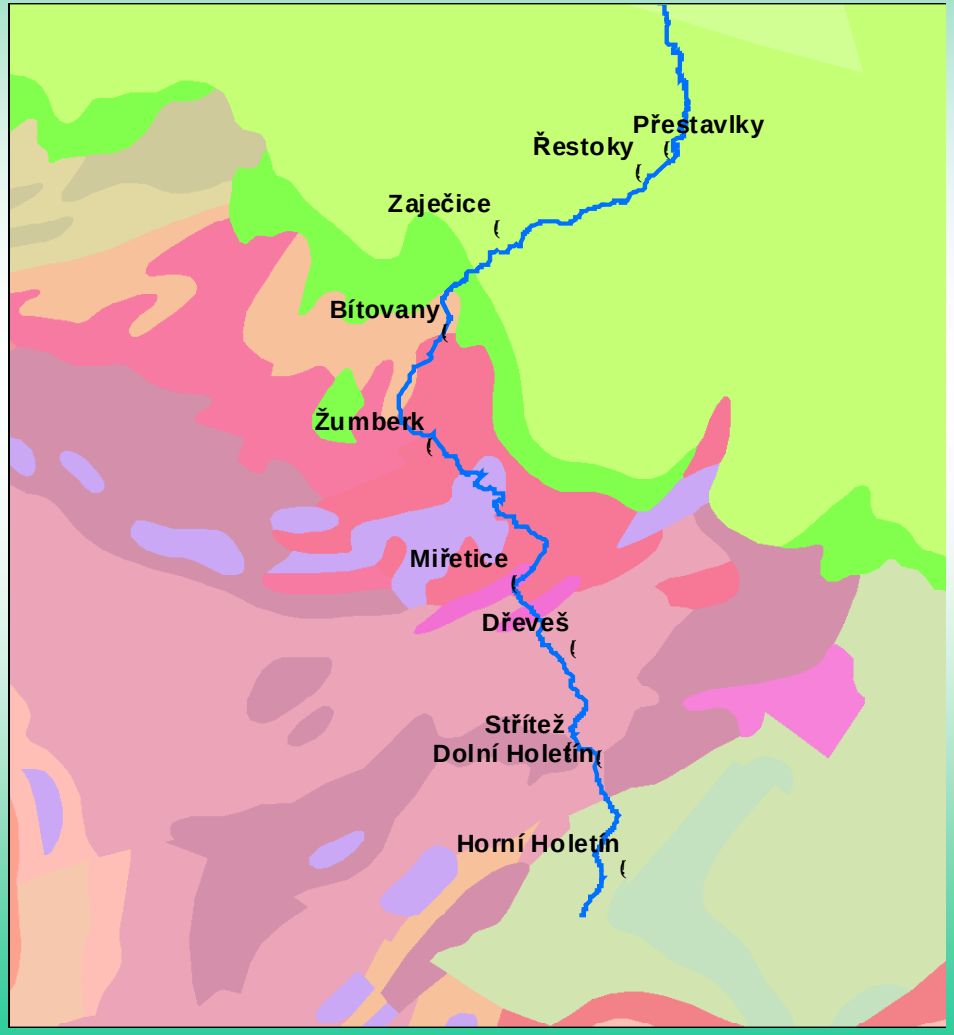
Granites

Tertiary sediments

Profile along Svitava

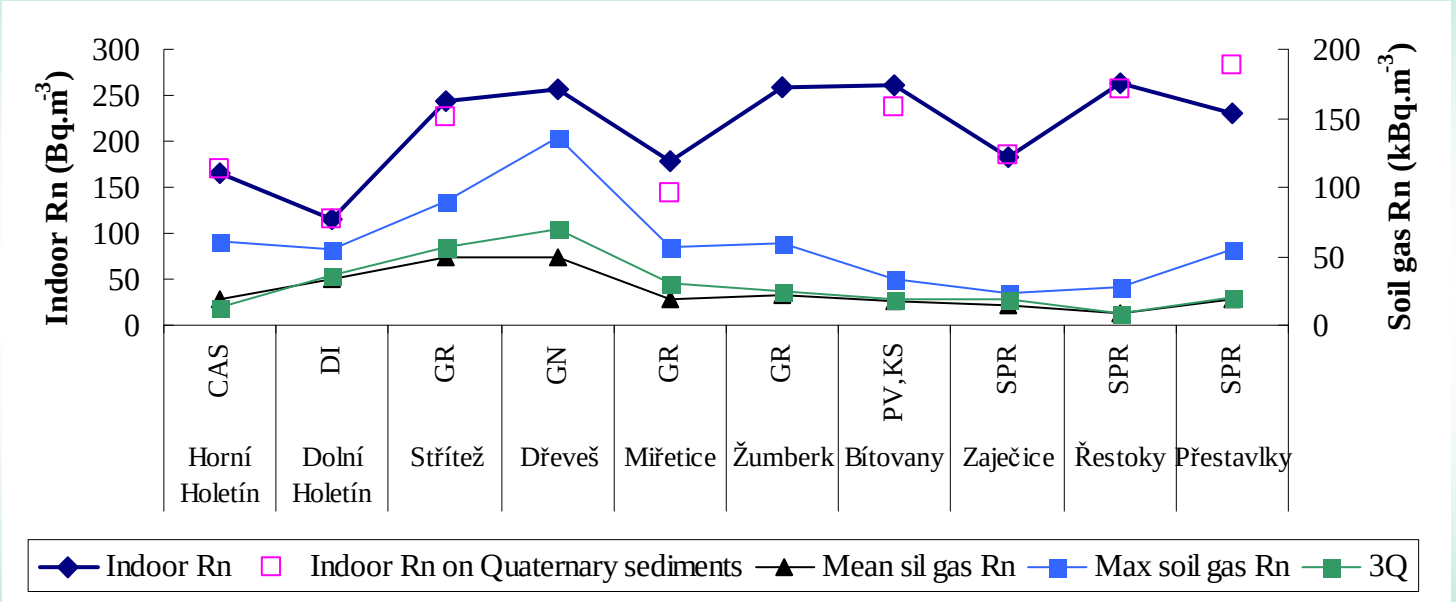


Profile along Ležák

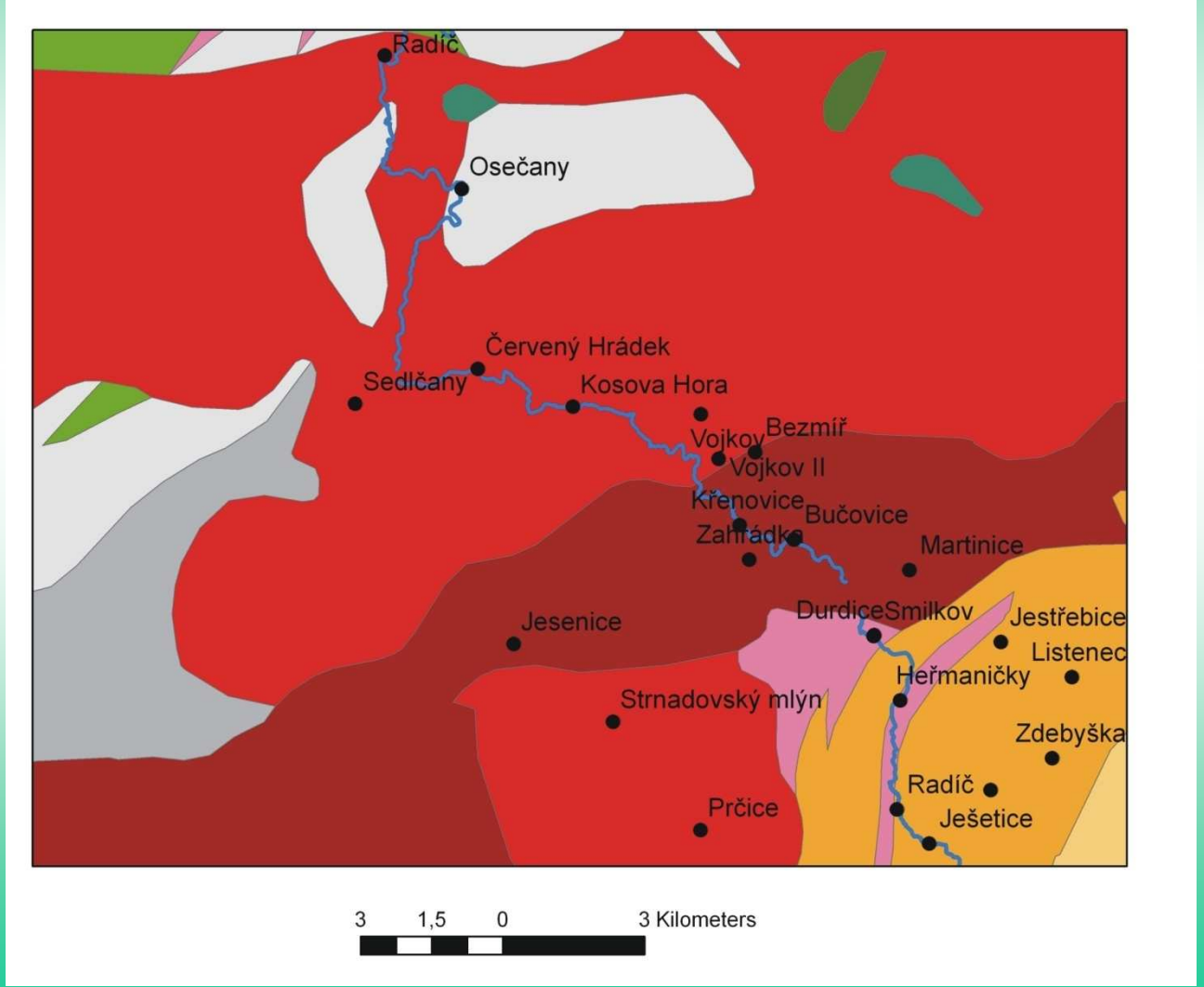


- Cretaceous sediments
- Palaeozoic metamorphites
- Granodiorites
- Metharhyolites
- Migmatites and orthogneisses
- Gabbro

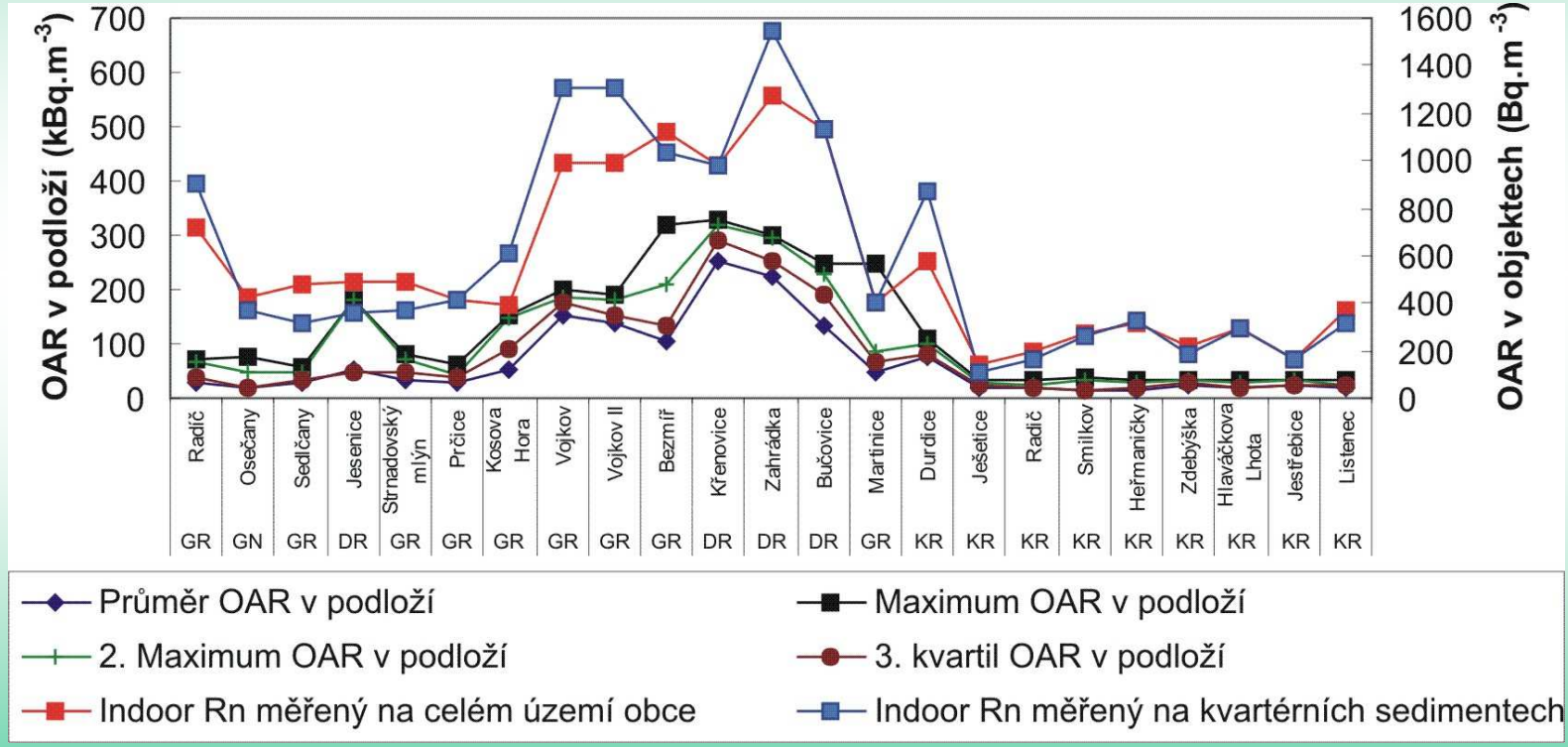
Profile along Ležák



Profile along Mastník



Profile along Mastník



Summary

- No differences in indoor Rn measured on Quaternary sediments and in the entire municipal territory.

- The effect of lateral transport of sedimentary material along the rivers is marginal.

Summary

- The resulting level of indoor radon volume activity is sensitive to the presence of positive variations in the basement.