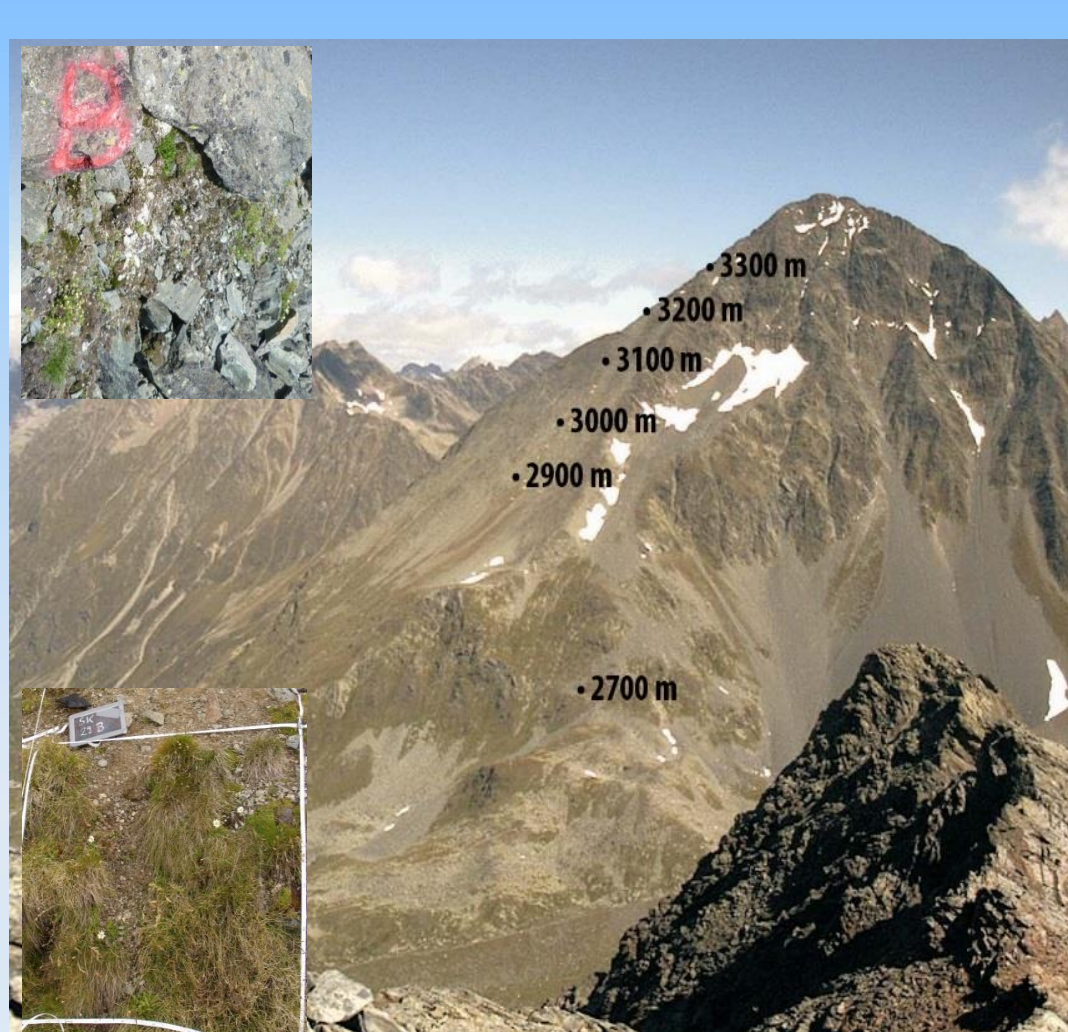


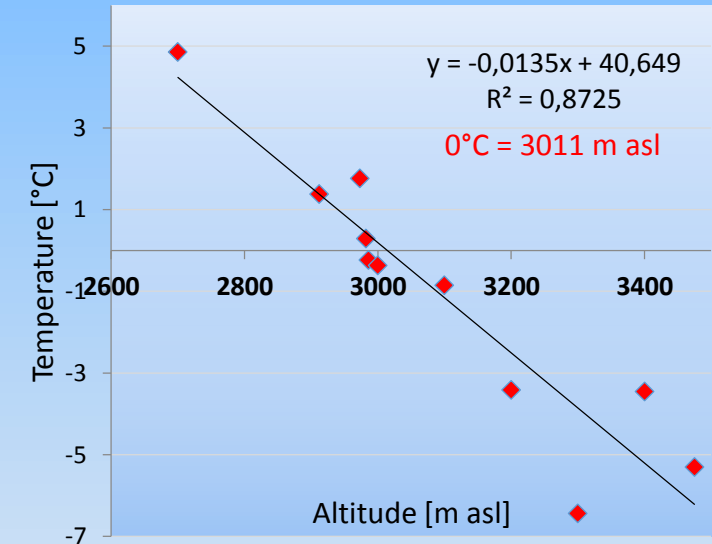
# Abundance, activity and biodiversity of soil microorganisms along an elevation gradient between 2700 and 3300 m asl and a thinning out alpine meadow.

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## Altitudinal gradient at Mt Schrankogel (3497 m)

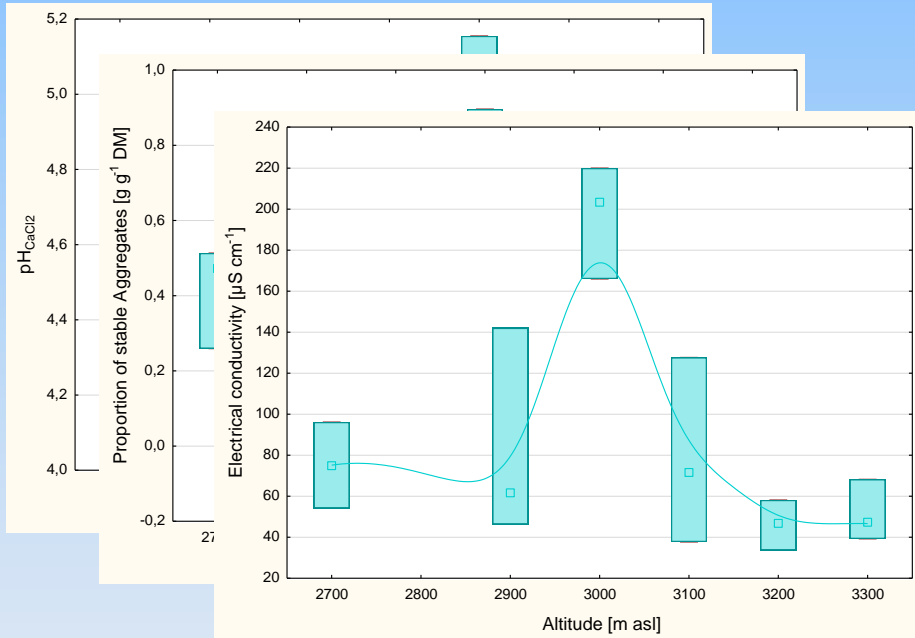
closed meadow at the bottom  
sparse vegetation at high altitude



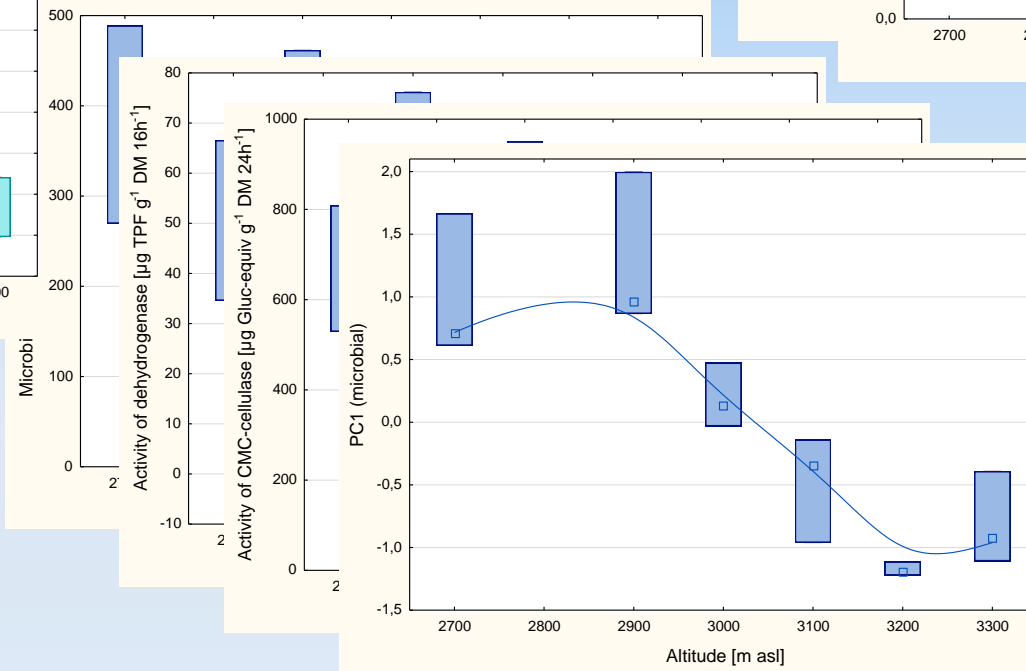
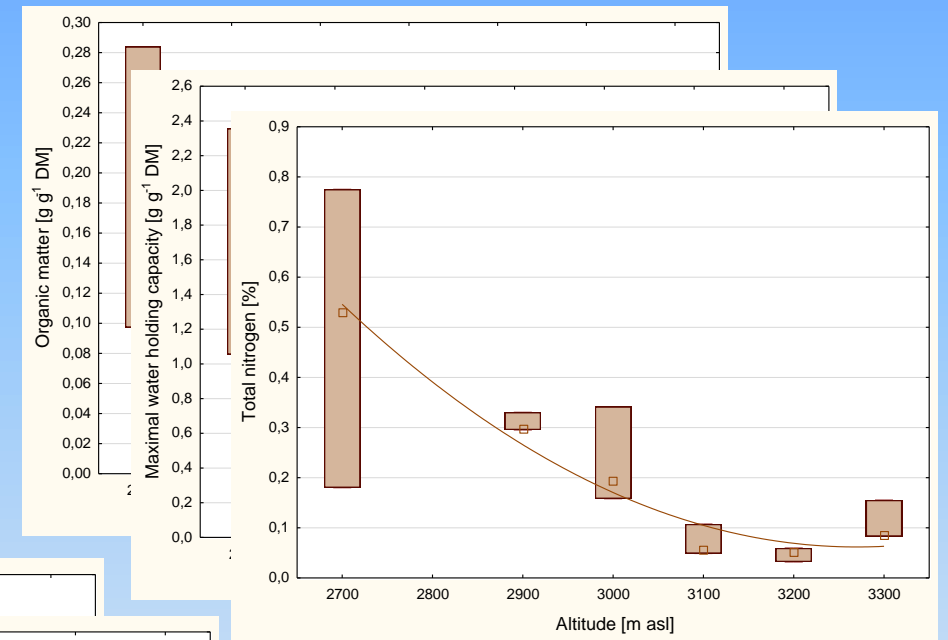
## Research question

- What are the driving factors for abundance and activity of Mo's
- Are there linear or other connection with altitude (temperature)?
- Are there hints regarding future scenaria or for subpolar regions? (100 m  $\approx$  400 km in subpolar region (tundra)?

## Peaks (abiotic soil properties)



## Continuous decrease (OM, nutrients)



## Sigmoidal (microbial parameters)

- Microbial and vegetation parameters have the very same inflection points pointing to distinct changes at an intermediate altitude of 3000 m asl
- This altitude is exactly the zero degree line of Mt Schrankogel
- With increasing zdl also the activity and abundance of Mo's might increasing (go to the north)
- Bad news ☹️

