

Kolloquium des Institutes für Landschaftsökologie WiSe 23/24

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18 Uhr c.t.

Hörsaal Geo1, Universität Münster

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Effects of multiple global change factors on soil

Soils and ecosystems are exposed to a wide range of global change factors (or more generally, environmental factors), many of which occur concurrently. However, in experiments we typically only examine a few factors at a time, most commonly one or two. Using a 'random sampling from a factor pool' approach, we experimentally address up to ten factors, creating a factor number gradient. Along this factor number gradient, soil properties, processes and soil fungal diversity responded in a clear trajectory. This response was rather unexpected, since the factors themselves were either positive, neutral or negative in their effects. I finish with a discussion of an observational approach, transforming continuous environmental data into factor numbers to show that the signal of factor number is also present in global-scale data. Our world is inherently multi-factorial and we need to find ways to study this in experiments.