

Kolloquium des Institutes für Landschaftsökologie WiSe 23/24

NACHHOLTERMIN

07. Mai 2024

18 Uhr c.t.

Hörsaal Geo1, Heisenbergstr. 2, Universität Münster

Dr. Jörg Bendix

Universität Marburg

Machine learning in fog climatology, ecology and nowcasting – the ultimate approach ?

Fog and low stratus (FLS) have both negative and positive effects in terms of transport, atmospheric water supply to ecosystems and climate change. However, the spatio-temporal dynamics in many areas of the world (e.g. South America) are still poorly understood and the spatio-temporal forecast of this phenomenon is still deficient in general. Whereas in the past, the aim was mostly to model FLS in time and space using physically based methods, machine learning and hybrid methods are increasingly being used to improve the accuracy of the physically-based models that has been achieved to date. Using the example of various ongoing research projects (e.g. nowcasting of fog in Germany, spatial modelling of fog over short and long periods in Europe and South America), the currently possible improvements and their limitations will be discussed in the talk.