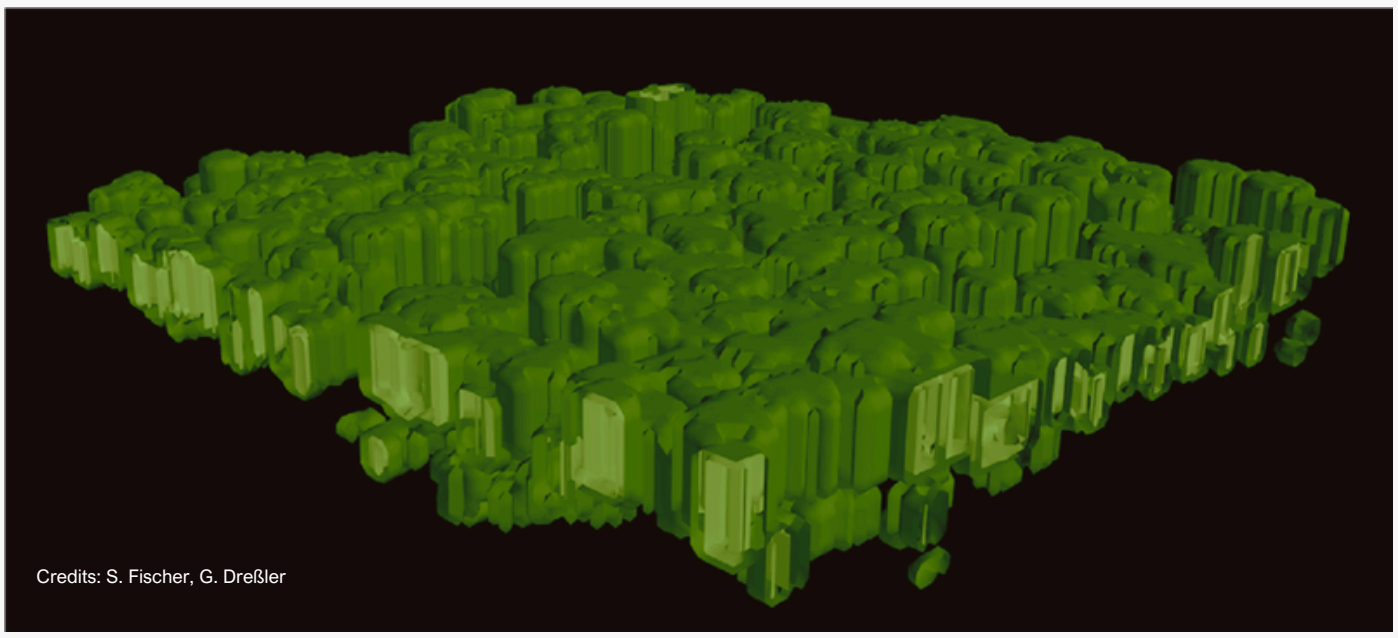
transfun Project

Idee fördern | Umsetzung beschleunigen

ForSimBoard2

Development and validation of an integrated forest management and simulation platform



Project:

The ForSimBoard2 project develops an integrated forest management and simulation platform that revolutionises forest planning under climate change. Through an innovative hybrid approach combining process-based modeling, data-driven algorithms, and real-time environmental data integration, ForSimBoard2 seeks to establish a web-based dashboard that enables forest managers to predict and optimize forest development with significantly higher accuracy compared to current management tools.

Financial volume/ term:

50,000€ / 10 months

Team:

Project leader: Samuel Fischer, Gunnar Dreßler
Partner: Henrik Hartmann (Julius Kühn Institute)
Mentor: Job von Nell (von Nell'sche Forstverwaltung)

Status Quo:

Current forest tools lack the ability to predict changes in climate, thus hindering sustainable transformation. This limitation particularly affects decision-making for long-term forest management strategies.

Challenge:

Develop a user-friendly forest simulation platform that supports management decisions and quantifies ecosystem services under climate uncertainty.

Solution:

ForSimBoard2 will provide an integrated web dashboard powered by a next-generation forest model that combines process-based simulation with machine learning approaches. This platform enables visualization of forest dynamics, planning of management actions, and quantification of ecosystem services. The modular architecture allows flexible adaptation to different forest types and management objectives, while automated integration of environmental data ensures reliable predictions under changing climatic conditions.

Partners:

JKI Julius Kühn-Institut

If you are also interested in funding, please get in touch with us by email, phone or in person!

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