

Hands-on Landscape-Based Ecological Risk Assessment Using the Open-Source xLandscape Modelling Framework

SETAC Europe, 17 May 2026

"A SETAC Europe **training course on landscape modelling** has so much potential to be **engaging, playful, and genuinely memorable**, especially because **the topic sits at the intersection of ecology, spatial thinking, and systems dynamics**. People learn landscape modelling best when they can *see, touch, and experiment* with the concepts, not just listen to slides." (Copilot March'26)



Introductory Remarks

SETAC Europe, 17 May 2026

This is the first training course on landscape modelling using the xLandscape framework.

To make up for any gaps in our early-stage preparation, please reach out with questions or roadblocks as you begin using xLandscape in your projects.

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Welcome

I'm Thorsten Schad

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Biologist, with a background in physics, math and informatics
27+ years in environmental and landscape modelling,
esp. in risk assessment of pesticides

Co-creator of xLandscape

Passionate about cultivated landscapes, balancing human
welfare, natural ecosystems and biodiversity



Content

13.30 – 17.30

13:30 - 13:50	Introduction and Fundamentals <i>What's meant by landscape-level risk assessment</i>	Thorsten
13:50 - 14:15	Introduction to xLandscape <i>Motivation, concepts, design</i>	Thorsten, Sascha
14:15 - 15:15	Aquatic Risk of Invertebrates <i>A real-world risk assessment problem for the use of an insecticide</i>	Thorsten
15:15 - 15:30	Coffee Break	
15:30 - 16:30	Aquatic Risk of Water Plants <i>A real-world risk assessment problem for the use of a herbicide</i>	Sebastian
16:30 - 17:15	Pollinators <i>Risk assessment and management for honey bees</i>	Julian, Sascha
17:15 - 17:30	Wrap-up, Q&A, Outlook	all

The Rise of AI - A game changer!

affecting,

xLandscape development

Analysis, visualization, reporting

User Interface

Scenario development

Documentation, Training

→ **Consequences** on training focal take home

low AI impact ↑ high

Technical implementation, usability (UI)

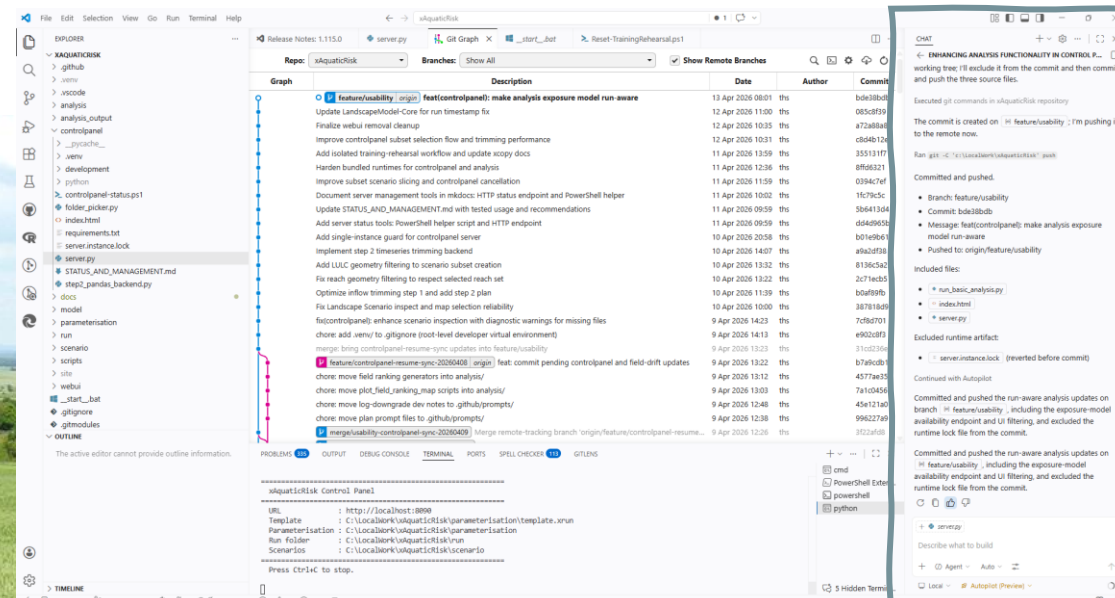
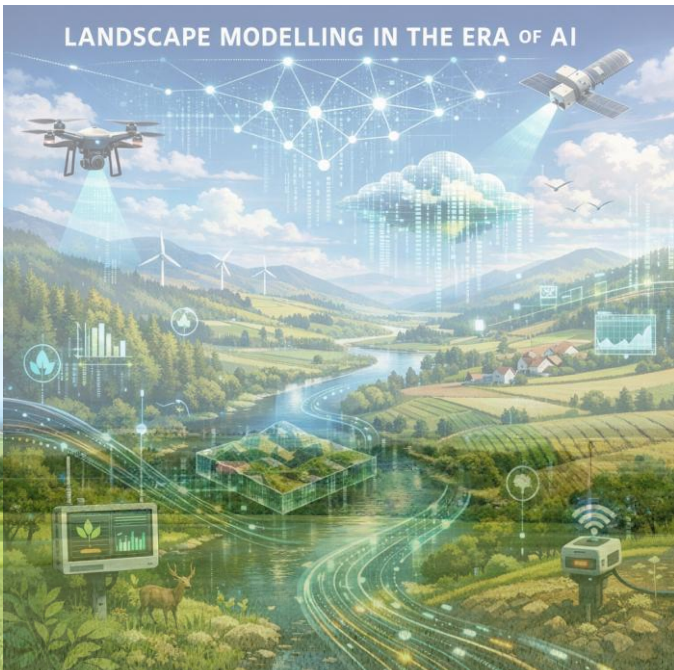
Range of application.

Model Results. Evaluation. Communication.

Concepts, esp. modularity. Architectures.

Motivation for Landscape Modelling. Strategies.

Regulatory framework.



Wetterau, Hessian, Germany