

Digital Twin frameworks for multifunctional landscapes

Tuesday 5 March 2024 14:15 (2 hours)

The Digital Twin approach provides the ability to observe changes in the ecosystem in near real-time and to digitally predict future changes –both allowing for immediate action in case of undesired developments. This also incorporates to implement management strategies and visualise their outcomes. Digital Twin frameworks are characterised by frequent updates and feedbacks between the real world (via monitoring and potential actions) and its digital counterpart (via model predictions and information for decision-making). This session aims to discuss concepts and developments of Digital Twin approaches in Topic 5 for terrestrial ecosystems and to foster exchange on challenges and solutions in integrating all relevant (i) data sources including their frequently updates as well (ii) interactions and feedbacks of these complex systems from the digital counterpart to the real-world system. These encompass feedbacks with natural dynamics as well as responses to human, socio-economic and political measures.

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Session Classification: Breakout Sessions