



Workshop „How to predict future land use and biodiversity change under climatic change at the regional level“

Virtual conference

Date: Oct 5th – Oct 7th 2020

Contact: bayklif office or

Mona Reiss, Projektkoordination BLIZ,

Email: mona.reiss@tum.de

Abstract

Climate change will impact biodiversity directly, through changing climatic conditions at all spatial scales, but also indirectly, through changing patterns of future human land use, globally, but also locally. The indirect and direct effects of climate change on biodiversity change are important because land use change is already the main driver of current biodiversity loss. Direct climate change effects can be modelled based on species responses to changed climatic conditions and a change in habitat conditions, i.e. purely ecological

considerations. In contrast, future changes in land use depend on the change in abiotic conditions and also on how humans decide to change their land use under climate change, making the estimation of indirect climate change effects an even larger challenge. Land-use decisions are affected by globalisation and global flow of goods, but for a particular piece of land are made at the local and regional level. Thus, modelling the indirect effect of climate change on biodiversity requires modelling regional land use under climatic change. This workshop will bring together various modelling approaches to understand how regional climate change and land use models can be combined to predict direct and indirect effects of climate change on local biodiversity. The product of the workshop will be a perspective paper outlining the challenges and potential solutions for regional predictions of biodiversity change under climate change.

Timetable

Monday, Oct 5th, BLIZ and Keynote speakers only

18:00 – 18:30 Introduction talk Bayklif, BLIZ and Workshop's objectives

18:30 – 19:30 Virtual Dinner and presentation round participants

Tuesday, Oct 6th

09:00 - 09:45 Damaris Zurell, Biodiversity modelling

09:45 - 10:30 Thomas Berger, Land use modelling

10:30 - 11:00 break

11:00 – 11:45 Thomas Knoke, Economics of land use modelling

11:15 – 13:00 lunch break

13:00 – 13:45 Peter Verburg, Farmers decision and land use modelling

13:45 – 14:30 Heiko Paeth, Climate change modelling

14:30 – 15:00 Anja Rammig, Climate change modelling

15:00 – 15:30 break

15:30 – 16:00 Juliano Sarmiento Cabral, Biodiversity modelling

16:00 – 16:30 Alma Mendoza-Ponce, Land use, climate and ecosystem services modelling

16:30 – 17:00 Division into workgroups and lookout day 2

Wednesday, Oct 7th

09:00 – 10:00 Postersession Bayklif research projects

10:00 – 11:00 Workgroups

11:00 – 11:30 break

11:30 – 12:30 Workgroups

12:30 – 13:30 break

13:30 – 15:00 Report of workgroups

15:00 – 15:30 break

15:30 – 16:30 How to proceed: next steps

16:30 – 17:00 Farewell