Permafrost-thaw effects pathogen mobilization and water-related spreading pathways

We simulated permafrost-thaw for different local soil conditions and large-scale surfacewarming trends:

- Robust simulation results show strong thaw evolution dependence on the local soil conditions – in addition to the surfacewarming trends.
- Potentially severe consequences of permafrost-thaw for mobilization and spreading of previously frozen pathogens in both peatlands and mineral soils.



Figure: Bifurcation in wetland/lake evolution and feedbacks depending on extent of permafrost thaw



