

Towards Bayesian Uncertainty Quantification for Forestry Models Used in the U.K. Greenhouse Gas Inventory for LULUCF

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Abstract

The GHG Inventory for the U.K. currently uses a simple carbon-flow model, CFLOW, to calculate the emissions and removals associated with forest planting since 1920. Here we aim to determine whether a more complex process-based model, BASFOR, could be used instead of CFLOW. The use of a more complex approach allows accounting for spatial heterogeneity in soils and weather, but places extra demands on uncertainty quantification. We show how Bayesian methods can be used to address this problem.