## 9th bwHPC Symposium



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## The agroecosystem multi-model library, Expert-N on high-performance computers (HPC)

Monday, October 23, 2023 3:45 PM (15 minutes)

Soil-crop modeling plays a pivotal role in modern agricultural research by estimating environmental impacts, optimizing resource use, and predicting crop yields, particularly in the face of climate change.

Expert-N, an agro-ecosystem model library, provides a versatile framework for soil-plant-atmosphere modeling, leveraging High-Performance Computing (HPC) to enhance model accuracy through calibration and sensitivity analysis.

Here we describe the Expert-N software package and explore its integration with HPC for parallel computing, showcasing specific research endeavors undertaken in this domain.

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