ACG31-18　　　　　会場:201B　　　　　　　　　時間:5 月 26 日 11:00-11:15

動的植生モデル SEIB-DGVM を用いた葉面積指数に基づくデータ同化実験
Data assimilation experiments with simulated LAI observations and the dynamic global vegetation model SEIB-DGVM

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Vegetation dynamics is strongly tied to the global carbon cycle and is an important part of the Earth System Model (ESM) to simulate the climate change. The dynamical vegetation model is also useful to predict the biodiversity change. However, vegetation models tend to have large uncertainties. Data assimilation provides an approach to dealing with the uncertainties, and recently started to be applied to the ecological studies. In this study, we develop an ensemble data assimilation system with a dynamical global vegetation model known as the SEIB-DGVM (Spatially Explicit Individual Base Dynamic Global Vegetation Model). As the first step, data assimilation experiments are performed with the SEIB-DGVM using simulated LAI observations. The results suggest that the LAI and parameters related to the phenology be a key to designing an appropriate data assimilation system for the SEIB-DGVM.

キーワード: データ同化, 陸域生態系, シミュレーション
Keywords: data assimilation, terrestrial ecosystem, simulation