



Impact of the European 2003 drought event on terrestrial biosphere characteristics - what do we learn by model parameter inversion against data from selected eddy covariance sites

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The impact of the European drought event in 2003 on water and carbon fluxes between atmosphere and terrestrial biosphere has been well described. Still the response of terrestrial biosphere characteristics, like photosynthetic capacity, autotrophic and heterotrophic basal respiration or stomatal sensitivity, has to be analysed to better understand the impact of such climate anomalies on the terrestrial biosphere. These characteristics are represented as parameter values in biosphere models and model-data fusion has become an important tool to derive information about these parameters by inversion against measured data. Here we present first results from parameter inversions of the terrestrial ecosystem model BETHY against Eddy covariance data of net ecosystem exchange (NEE) and latent heat flux (LH) for selected European sites for the period 2000 to 2004 using a Bayesian approach and a Markov Chain Monte Carlo technique.