Global Change and Terrestrial Ecosystem Experiments - Challenges from Climate Policy and Biodiversity Conservation

Wolfgang Cramer*†[1]

[1]Institut méditerranéen de biodiversité et d'écologie marine et continentale (IMBE) – INEE, Université d'Avignon et des Pays de Vaucluse, Institut de recherche pour le développement [IRD] : UMR237, Aix Marseille Université, CNRS : UMR7263, INSB, INSU – Aix Marseille Université, Campus Etoile, Faculté St-Jérôme case 421 Av. . escadrille Normandie-Niemen 13397 MARSEILLE CEDEX 20, France

Abstract

Land ecosystems are affected by environmental change in numerous ways, rising annual mean temperature being only one indicative variable. Experimental facilities permit to address specific relationships between environmental conditions and the functioning of the ecosystem with increasing detail and precision, but does our capacity to predict the overall behaviour of the ecosystem actually improve? Providing useful knowledge for environmental policies requires a multi-dimensional approach that considers ecosystem and earth system theory, observations from experiments and natural conditions, numerical models, and a suitable scenario framework that can be used to explore alternative future conditions.

Keywords: global changes

*Speaker
†Corresponding author: