

Dr. Alexander Graf

Affiliated with the Agrosphere Institute (IBG-3)

BMBF Young Investigator Group: IDAS-GHG



"The success of an externally funded project greatly depends on the infra-structure, support, and people at your hosting institution. And that's why we're here :-) "

Research project:

The group, funded by the Ministry of Education and Research (BMBF) and hosted at the IBG-3, aims at improving and facilitating the partitioning of existing greenhouse gas exchange measurements between vegetated surfaces and the atmosphere. While net

exchange of CO₂ and water vapor is measured on a routine basis, their sources (e.g. photosynthesis vs. soil respiration and plant transpiration vs. evaporation) can only be inferred indirectly, which is currently done by a wide variety of methods. We will perform a

comprehensive comparison of the strengths and weaknesses of existing methods, develop improved methods, and apply them to agricultural, grassland and forest ecosystems relevant for the mitigation of anthropogenic greenhouse gas emissions.

What is/has been the greatest challenge as head of a young investigators group:

"Probably the increased diversity of 'levels' of scientific work: Being the main supervisor of several PhD students, administration, teaching - and yet maintaining one's own direct involvement in field work, programming, data analysis and scientific writing."

Start of funding period: August 2014

End of funding period: July 2018

Budget: € 280.000 per Year

Staff: 3 PhD students, assistants

Further information: IDAS – GHG (Instrumental and Data-driven Approaches to

Source-Partitioning of Greenhouse Gas Fluxes)