



climate

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Modeling Interactions Among Atmosphere, Hydrosphere, and Biosphere

Guest Editor:

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Deadline for manuscript
submissions:

closed (28 February 2018)

Message from the Guest Editor

The Special Issue includes conceptual approaches and new model developments, as well as comparisons with experimental results and observations with respect to the following topics:

- Environmental dependency on plant water uptake; including interactions with nutrient availability, mycorrhiza and root growth.
- Development of water use efficiency with changes in carbon dioxide concentration. Long and short term responses of stomatal and canopy conductance.
- Competition and facilitation in heterogeneous plant communities and their impact on resistance and resilience of the ecosystem.
- Emission of biogenic volatile organic compounds (BVOC) in response to environmental stress. Impact of drought and air pollution and dependency on leaf traits and phenological state.
- Air pollution removal by plants in dependence on plant physiology and vegetation structure.
- What are the effects of diversity and spatial heterogeneity on gas exchange and deposition in a landscape?

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Special Issue