

CGU_B_03: Impacts of Agricultural Management on Nutrient Dynamics in Sediment, Soil and Vegetation Under Current and Future Climates

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Session Description

Maintaining food security while fostering environmental sustainability requires an understanding of how agricultural nutrient management practices will function in future climates. This open session will bring together interdisciplinary research focusing on the biogeochemical cycling of nutrients in vegetation, soil and sediments in agricultural ecosystems. Of particular interest are observational or experimental contributions on how physicochemical, microbial, hydrological and/or climatic factors may impact plant-soil or sediment biogeochemical processes within fields or adjacent riparian areas and streams. Presentations that investigate the mechanisms of nutrient cycling and those evaluating the performance of agricultural beneficial management practices (BMPs) with respect to controlling nutrient fluxes, nutrient speciation or crop productivity are encouraged. Sample topics include identification of the role of seasonality/frost or antecedent hydrological conditions on BMP performance including but not limited to: tillage, cover crops, water table management, riparian management, fertilizer and manure management practices.

Primary Affiliation: CGU, Biogeosciences

Joint Session Submission: CSSS; CGU, Hydrology