Plant-soil interactions and soil carbon dynamics under climate extremes

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Climate extremes have been suggested to increase significantly in intensity and frequency in the coming decades, and may influence ecosystem processes and the carbon cycle more profoundly than gradual climate warming. While there is a growing understanding of plant-soil interactions in extreme environments and from lab experiments, we still know very little about how such interactions affect soil carbon dynamics in real-world ecosystems exposed to climate extremes. In this talk I will give a brief overview of the topic and will present evidence from in-situ experiments on plant-soil interactions and their consequences for soil carbon dynamics under severe drought.