



Response of vegetation to precipitation intermittency in arid ecosystems: results from a simple ecohydrological model.

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We discuss the results of a simple stochastic model describing soil moisture and biomass variations induced by precipitation intermittency in arid ecosystems. The main effect of rainfall intermittency is to favour vegetation persistence also for soil moisture values that are lower than those needed in the case of constant rainfall. In addition, we discuss the effects induced by two different types of vegetation feedbacks on soil moisture balance: owing to the root-uptake feedback, soil-water losses increase due to increased evapotranspiration; owing to the biomass-infiltration feedback associated with the presence of biogenic crust, infiltration increases in vegetated soil.