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Hydrological and geochemical processes constraining groundwater

salinity in wetland areas related to evaporitic (karst) systems. A case

study from Southern Spain

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Abstract

Chemical and isotopic evolution of groundwater in an evaporite karst plateau (including wetland areas and saline to hyper-saline springs) located at S Spain was studied. Physicochemical parameters, major ions and stable isotopes were analyzed in rain, brine spring, wetland and leakage water samples, from which the most common mineral saturation indexes were computed and geochemical and isotopic modeling were performed. Results show an apparent relationship between the elevation of brine springs and their water mineralization, indicating that drainage at higher altitude may be associated to gravity-driven flows, since brackish groundwater is isotopically

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