

Aproximación a las tendencias pluviométricas y escenarios climáticos futuros en Doñana. Posibles efectos sobre la vegetación de humedales y lagunas

First approach to rainfall trends and future climate scenarios in Doñana. Possible effects on wetland vegetation and ponds

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Climatic variations and trends play a key role in the ecosystem even more if sustained over time. Therefore, the aim of this study is to present the most relevant recent changes observed in the observatory at the Palacio de Doñana (1979-2013) and in an average rainfall series representing the surrounding extending beyond the century (1903-2008). The main rainfall patterns seem to show a sustained downward trend of spring rainfall and increased variability in the winter series also detected at annual scale. These results are evaluated in relation to the outputs of the regional climate model CLM (Climate Local Model) developed by the Max Planck Institute suggesting a general process of lower water availability in Doñana that maintained the secular trends identified during the twentieth century. These results could be vital to Doñana's wetland vegetation and ponds.

Key words: rainfall; trends; climate scenarios; vegetation; Doñana; Andalusia.