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Linking changes in daily precipitation values and extremes with weather patterns

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Climatic change has been one of the most important concern in the last years, specially in a global scale. The scope of this paper is to bridge the gap between the global scale and the regional scale. So, the trends in the frequency of daily precipitation values and their extremes are analysed. The study area is Galicia, located in the northwest of Spain. Although this region is influenced by the pass of cold fronts coming from the Atlantic Ocean, this is not the unique synoptic situation that leads to rainfall. There is a complex ensemble of atmospheric configurations that implies precipitation over Galicia. Having these ideas in mind, a classification of weather patterns is made by means of Rotated Principal Component Analysis. Some trends in the weather types are found and studied, being related to the observed changes in the frequency of days with extreme precipitation.