Estimation of the Drought Index Based on the Climatic Projections of Precipitation of the Uruguay River Basin

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Abstract : The impact the climate change is not recent, the main variable in the hydrological cycle is the sequence and shortage of a drought, which has a significant impact on the socioeconomic, agricultural and environmental spheres. This study aims to characterize and quantify, based on precipitation climatic projections, the rainy and dry events in the region of the Uruguay River Basin, through the Standardized Precipitation Index (SPI). The database is the image that is part of the Intercomparison of Model Models, Phase 5 (CMIP5), which provides condition prediction models, organized according to the Representative Routes of Concentration (CPR). Compared to the normal set of climates in the Uruguay River Watershed through precipitation projections, seasonal precipitation increases for all proposed scenarios, with a low climate trend. From the data of this research, the idea is that this article can be used to support research and the responsible bodies can use it as a subsidy for mitigation measures in other hydrographic basins.

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Keywords : climate change, climatic model, dry events, precipitation projections

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