

TEMPORAL VARIATION OF METEOROLOGICAL DROUGHT IN MEWAR REGION OF RAJASTHAN

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ABSTRACT

The study investigated the temporal change of meteorological drought in the Mewar region with the help of Standardized Precipitation Index (SPI). Total area of Mewar region was divided into 56 grids of 30 × 30 km. Monthly rainfall (1981-2014) of 17 stations was interpolated using Inverse Distance weighing method of ArcGIS 9.3 and gridded monthly rainfall was generated. Mean monthly areal precipitation in Mewar region was calculated by averaging rainfall of each grid to determine the regional representative of the Standardized Precipitation Index at various time scales (Ex., 6-, 9-, 12 and 24- month SPI) for examining the regional nature of drought attribute like severity, magnitude and intensity. The study found out many moderate, severe and extreme drought events during the period of analysis. The results of the study can be used for formulating a drought plan and mitigation strategies for the region.

KEYWORDS: Temporal Variation, Mewar Region & Standardized Precipitation Index

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