

Results from 5 years of precipitation observations from the NAME Event Rain gauge Network (NERN) in Northwest Mexico

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A network of 80 tipping bucket rain gauges has been operated in the Sierra Madre Occidental mountain region of northwest Mexico since 2002 and 2003. The network has provided critical data on the relation of the diurnal structure of rainfall characteristics, frequency and intensity, as they relate to physiographic features such as terrain elevation and distance from the waters of the Gulf of California. The network has also served as a key validation dataset for the assessment of operational precipitation analyses as well as quantitative precipitation estimates (QPE) from remotely-sensed platforms. In this work we present recent work that analyzes selected features of the annual cycle and interannual variability of rainfall that have been observed over the network's relatively short period of record. In doing so we contrast physiography-precipitation relationships between the cool and warm seasons and the degree to which such relationships vary over the period of record. Finally, a short synthesis is provided which assesses several recent works that have evaluated the performance of satellite QPE products using the NERN dataset.