Decadal variability of intense rain events over Western India

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Using the last 40 years of daily rain-gauge measurements over western India (grided at 1°x1°), intense rainfall events, with larger amplitude than monthly standard deviation, are first identified for each of the summer monsoon seasons (June-September). Decadal variability of these rain events is examined in terms of regional water cycle variability and large-scale decadal climate variability phenomena such as Pacific Decadal Oscillations (PDO), Atlantic Multi-decadal Oscillations (NAO), and Indo-Pacific warm-pool variability.