



## Decadal variability of intense rain events over Western India

A.V. Mehta (1), V.M. Mehta (2), and D. Prajapati (3)

(1) NASA-UMBC Joint Center for Earth Systems Technology (JCET), NASA/GSFC, Laboratory for Atmospheres code 613.1), Greenbelt, MD 20771, USA, (2) The Center for Research on the Changing Earth System (CRCES), 6521 Limerick Court, Clarksville, MD 21029, USA, (3) Indian Center for Climate and Societal Impacts Research (ICCSIR), Ahmedabad, INDIA

Using the last 40 years of daily rain-gauge measurements over western India (gridded at  $1^\circ \times 1^\circ$ ), 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.