

1125-00-2018      **Victorie Gore\*** (gorev@southwestern.edu). *Extreme Precipitation: Changes in Rain Frequency from 1895-2015 in Central Texas.*

Analysis of precipitation data reveals trends in extreme rainfall events over the last century. The United States has seen an increase in yearly precipitation, especially regarding extreme daily precipitation events. We apply multiple methods to longitudinal data from eleven different locations within a 100 mile radius of downtown Austin. We find a precipitation threshold for each station for multiple time periods, apply a declustering process, and then fit a Generalized Pareto Distribution to the values above the threshold. The resulting period curves created for each site and time period provide an estimate of the upper extremes of the precipitation spectrum. Our models reveal the extent of change in the trend of extreme rainfall events near Austin, TX. (Received September 19, 2016)