

Flash Flooding in the 5 Point Area of Columbia South Carolina: Giving Forecasters Better Tools to Forecast Flash Flooding

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The 5 Points Neighborhood in downtown Columbia South Carolina and parts of the University of South Carolina campus are prone to flash flooding. Flash flooding events have occurred 12 times over the past 31 months ending on December 31, 2009. These flood events occur very quickly and rapidly flood a portion of downtown Columbia, SC and a significant intersection on the USC campus making it a threat to life and property. This study will examine rainfall data from 3 observing sites, the Columbia Metropolitan Airport Automated Observing System (ASOS), Columbia Owens Field (ASOS) and the USC Cooperative Weather Station (COOP). The two ASOS sites have hourly precipitation data while the COOP site has only 24 hour precipitation data available. This rainfall data will be correlated to the Rocky Branch Creek levels measured at 2 stream gauging stations in the basin to determine the predictive value of the data reported by the above stations. The results will give forecasters another tool which can be used to make warning decisions.