**TITLE:** The Intensification and Effects of Storm Events During 'El Nino Years' in the Atlanta Metropolitan Area.

AUTHOR: William Christopher Scandrett

FACULTY SPONSOR: Dr. Ricardo Nogueira, Lecturer, Department of Geosciences

**INTRODUCTION:** The rhythmic cooling and warming climate trends known as El Nino and La Nina have occurred for the last 300 years. Some scientists and researchers believe that due to Global Warming, the storm events associated with El Nino in particular have intensified. Preseasonal snow, hot winter days, and flooding in arid regions are all tell-tale signs of this powerful weather phenomenon.

**PURPOSE:** Research on the storm events during years of El Nino, could lead to better preparation and prediction on future events in the Atlanta Metropolitan Area. This could save the city millions of dollars and perhaps save many lives.

**METHODS:** In this research study, I will be comparing temperatures, precipitation, fluctuations, extremes, and major weather events between El Nino years, La Nina years, and years in between. All data will be gathered from government and scientific agencies.

**EXPECTED RESULTS:** I predict that the data will reflect that the El Nino phenomenon increases the duration, intensity, and frequency of major storm events in Atlanta.

KEY PHARSES: El Nino, La Nina, Global Warming