Presentation Type (specify podium or poster presentation): Podium

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Department: Sustainability, Geography, and Environmental Planning

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Department: Sustainability, Geography, and Environmental Planning

Title: *Small scale TIN modeling for floodplain analysis of the Jacksonville University Campus*

Abstract

The goal of this project is to survey and map the main Jacksonville University campus to analyze resilience related to natural hazard preparedness and the long-term impacts of sea-level rise due to climate change. Survey points will be selected through a suitability analysis to determine optimal coverage of campus land. In contrast to traditional raster-based Digital Elevation Models (DEMs) which are low-resolution, surveyed points will be used to create a high-resolution Triangulated Irregular Network Model (TIN model). The TIN model will give us an accurate and up-to-date terrain map and elevation model, as well as reflecting new campus construction in the 2021-2022 school year. The creation of this model will allow us to answer the following