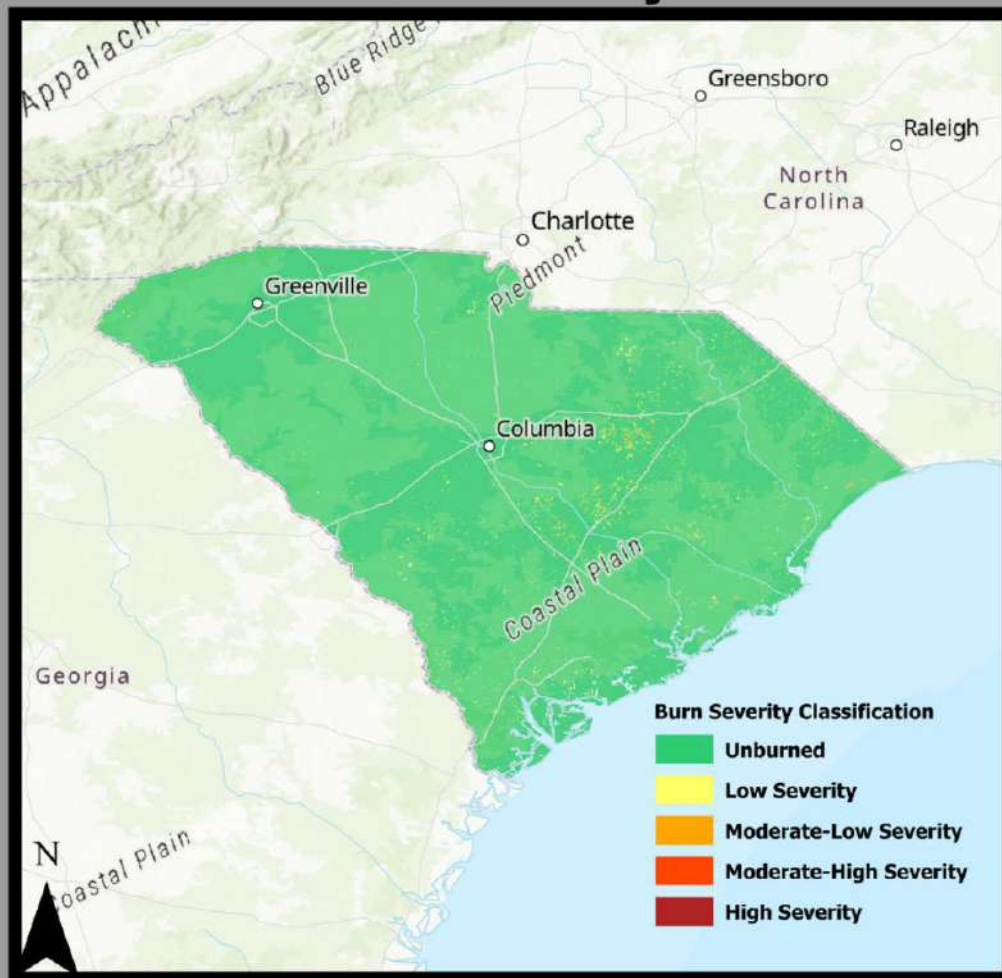
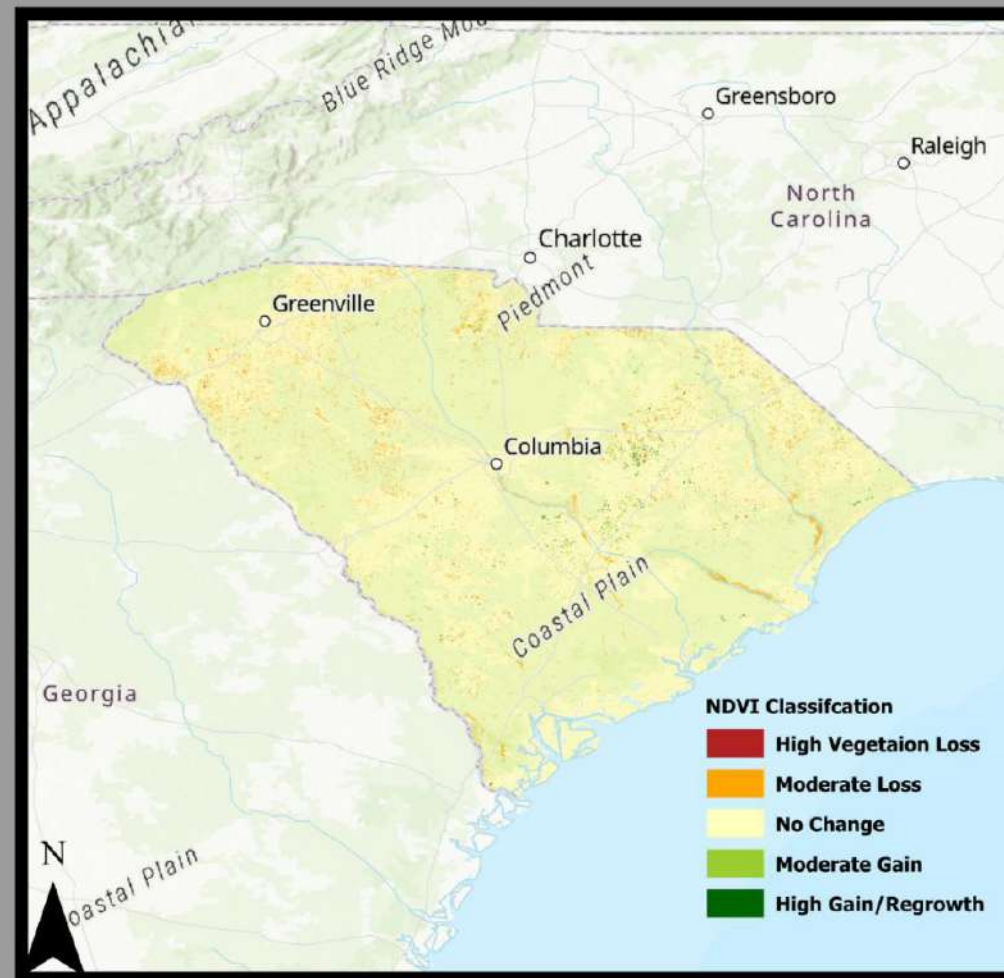


Burn Severity and Vegetation Loss in South Carolina (Feb–Apr 2025) Based on Sentinel-2 NDVI and VIIRS Fire Detection

Burn Severity



NDVI



Using satellite observations from Sentinel-2 and VIIRS, I assessed vegetation damage caused by early 2025 wildfires in South Carolina. The burn severity map (left) uses the Differenced Normalized Burn Ratio (dNBR) to highlight areas of high-intensity burns, particularly in the Piedmont and Coastal Plain regions. Red and orange tones indicate moderate to high severity, with notable clusters east of Columbia and in forested areas near Charleston. The NDVI change map (right) quantifies vegetation loss, showing strong agreement with dNBR hotspots.