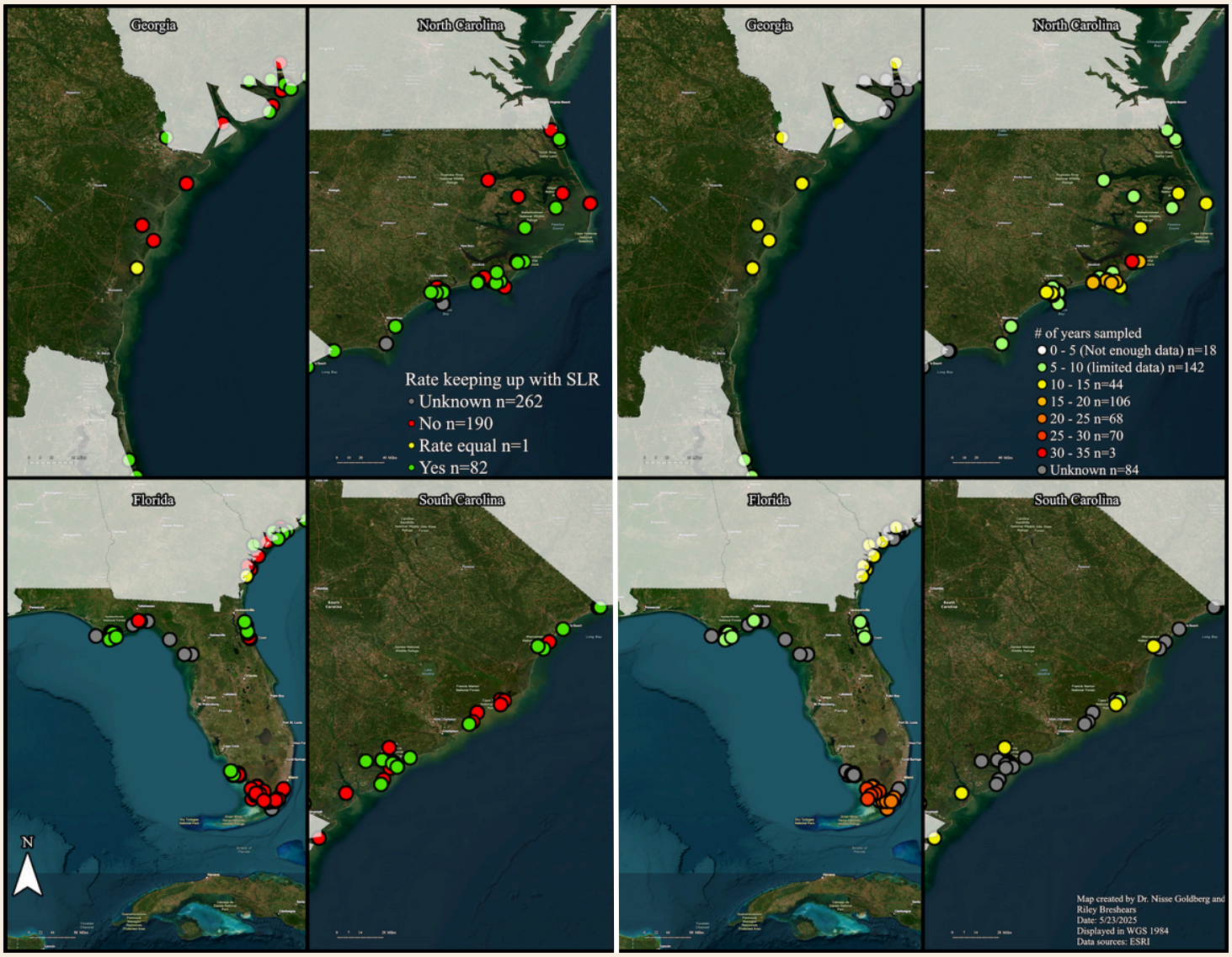
SET Elevation Monitoring in the South-East



Within the SECOORA region that includes North Carolina, South Carolina, Georgia, and Florida, SET monitoring data reveal a mix of trends in marsh elevations in relation to sea-level rise. In many places, marshes are gaining elevation through accretion, where layers of sediment and decaying plant material contribute, in part, to the increase in elevation. However, sea-level rise is outpacing elevational gains in most SET locations, and these marshes are at risk of submergence. Across the region, the percentage of SET stations keeping pace with sea-level rise is 32% in North Carolina, 42% in South Carolina, 20% in Georgia, and just 9% in Florida. While some marshes are successfully building elevation, the majority are falling behind, putting them at greater risk of submergence.

Even so, this is not just a story of loss. Healthy marshes contribute to increasing elevations, and we can help them succeed. By reducing risk factors that contribute to sea-level rise and supporting wetland protection through stronger policies, conservation easements, and land use planning and restoration efforts such as sediment enhancement, invasive species removal, and native vegetation planting, we can help marshes maintain their elevation and continue to provide essential benefits like protecting our coastal communities from storms, filtering water, and supporting fish and wildlife. Continued monitoring of our marshes using the SET methodology and communication of trends through long-term monitoring programs and public reporting is critical to providing the information for adaptive management, informed decision-making, and resource prioritization. For questions about the data or more information, visit SECOORA's Surface Elevation Table Community of Practice or contact ngoldbe@ju.edu.