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Two Saildrone Voyager USVs have been deployed from St. Petersburg for the first time to map Florida’s coastal waters within the continental shelf.

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ST. PETERSBURG, Florida: Saildrone is launching two 10-meter Saildrone Voyager uncrewed surface vehicles (USVs) from its facility in St. Petersburg, FL, to begin a mapping mission as part of the Florida Seafloor Mapping Initiative (FSMI), a multiyear effort to provide statewide stakeholders with accessible, high-quality, and high-resolution seafloor data of Florida’s coastal waters within the continental shelf.

At 2,170 kilometers long, Florida's coastline is second only to Alaska among US states. Many parts of the Florida coast remain unsurveyed, with existing nautical charts relying on outdated and low-resolution data. The goal of the Florida Department of Environmental Protection (FDEP) initiative is to provide updated mapping data of coastal systems, which is critical for protecting offshore infrastructure, habitat mapping, restoration projects, emergency response, coastal resilience, and hazard studies for the state's citizens.

"Saildrone is proud to support the Florida Seafloor Mapping Initiative with our unique and innovative Voyager USVs. As a member of the St. Petersburg community, we are excited to contribute to a project that seeks to improve our coastal resilience and enhance our ability to predict storm surge impacts by providing high-resolution bathymetry," said Brian Connon, Saildrone VP Ocean Mapping. "Saildrone USVs efficiently and safely collect high-resolution bathymetric data while minimizing environmental impact."

Saildrone has been tasked with collecting high-resolution multibeam data in a region known as Middle Grounds. The mission, valued at $1.66M, Saildrone will map 2,817 square kilometers of seafloor, approximately 130 kilometers northwest of St. Petersburg.

This is the first time that Saildrone has deployed Voyager USVs, equipped with NORBIT WINGHEAD i80s echo sounders for high-resolution mapping, and radar, AIS, and cameras for maritime domain awareness, out of Tampa Bay. In 2024, Saildrone Voyagers were used to map a portion of the Gulf of Maine to identify deep-water coral habitat. In Florida, Saildrone has previously deployed Voyager USVs for the US 4th Fleet out of Key West and currently has a fleet of Voyager USVs operating in the Caribbean in support of Joint Interagency Task Force South (JIATF-S) and US Naval Forces Southern Command/US Navy Fourth Fleet (NAVSOUTH/FOURTHFLT).

FSMI builds on the efforts of the Florida Coastal Mapping Program (FCMaP), an initiative led by federal and Florida state agencies and other community stakeholders to promote the need for a comprehensive high-resolution seafloor data set of Florida's coastal waters by 2028. The data will be available to update navigational charts and identify navigation hazards, provide fundamental baseline data for scientific research, and provide information for use by emergency managers and responders.

The data Saildrone collects will help better understand Florida's coastal vulnerability and hurricane impact, evaluate the performance of restoration projects, and support ongoing coastal resilience efforts and flood risk mapping.