

iRobot Seaglider collecting valuable data in the Gulf of Mexico

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iRobot, a leader in delivering robotic technology-based solutions, announced that its Seaglider Unmanned Underwater Vehicle (UUV) is currently being used as a platform to collect valuable ocean data in an effort to monitor the recent Gulf of Mexico oil spill. iRobot is working with Dr. Vernon Asper of the Marine Science Department at the University of Southern Mississippi and Dr. Craig Lee from the University of Washington's Applied Physics Laboratory.

Seaglider measures temperature, salinity and other ocean properties in 3-D at depths of up to 1,000 meters (3,290 feet). It allows researchers to collect data at depths not easily achieved using traditional surface platforms or other UUVs, and to potentially detect the presence of oil and its movement in affected areas. Researchers in the Gulf of Mexico have deployed Seaglider to locate and monitor large clouds of dispersed oil droplets believed to be at depths of approximately 700 meters (2,296 feet). Seaglider can provide up to 10 months of continuous operation, and data can be transmitted via satellite several times each day to anywhere in the world using an Internet-connected device.

"With Seaglider, we are realizing new and important mission profiles that it can support," said Joe Dyer, president of iRobot's Government and Industrial Robots division. "Traditionally, gliders have proven themselves to be very useful tools for researchers and oceanographers to collect ocean data. We are pleased that Seaglider is now playing an important role in the recent Gulf efforts. With this technology, we also see potential for the oil and gas industries to monitor existing lines and to detect new offshore oil sources."

"It is important to track any hydrocarbons that might remain at depths for extended periods of time," said Dr. Vernon Asper. "Previous data suggests that there may be some of this material at depths below 700 meters and that it appears to be moving. We are working with iRobot to deploy Seaglider in these locations, and we expect to learn a tremendous amount about the path and ultimate fate of this material."

The iRobot Seaglider is an un-tethered deep-diving UUV designed for missions lasting many months and covering thousands of miles. It is able to perform long endurance missions because it is driven through the water by changes in buoyancy rather than traditional propeller systems. Because it does not need to be operated from a ship or retrieved to gather data, it serves as a very cost-effective platform. More than 120 Seagliders have been delivered to customers worldwide, including the U.S. Navy, government agencies and research organizations.

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