



## **A new approach for deploying an ocean glider in a remote location**

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Deployment of profiling ocean gliders in remote or dangerous environments can be a challenge, but is needed to obtain ocean measurements for both research and marine resource management. In our ERC-funded research project COMPASS, we are developing a solution. We use an autonomous, wave-powered surface vehicle, AutoNaut, to carry a Seaglider to a remote location where it will release it. This presentation describes the challenge, and the design of the Seaglider carrying mechanism. The Seaglider will be carried beneath the AutoNaut in “recovery” mode, so that when released it will bob up to the surface away from the surface vehicle and call home for instructions. The release mechanism has been successfully demonstrated and tested in a harbour. Further trials are planned throughout 2019.

The first science trial of the Seaglider-carrying AutoNaut will be in early 2020 in conjunction with the project Eurec4a off Barbados. AutoNaut will carry the Seaglider to the intensive observation area and then release it. AutoNaut will be equipped with meteorological sensors to provide atmospheric measurements to complement the profiles of temperature and salinity from the glider. The aim is to make multidisciplinary simultaneous and co-located measurements of both ocean and atmosphere, to study air-sea heat and momentum fluxes. Future study sites are likely to include the fronts of ice shelves.