

AutoNaut USV and profiling ocean glider

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*COMPASS aims to devise a way of delivering a
profiling ocean glider to remote locations*



UEA plans to calculate air-sea fluxes and mixed layer budgets by deploying...

AutoNaut wave-powered autonomous surface vehicle, 5 metres long

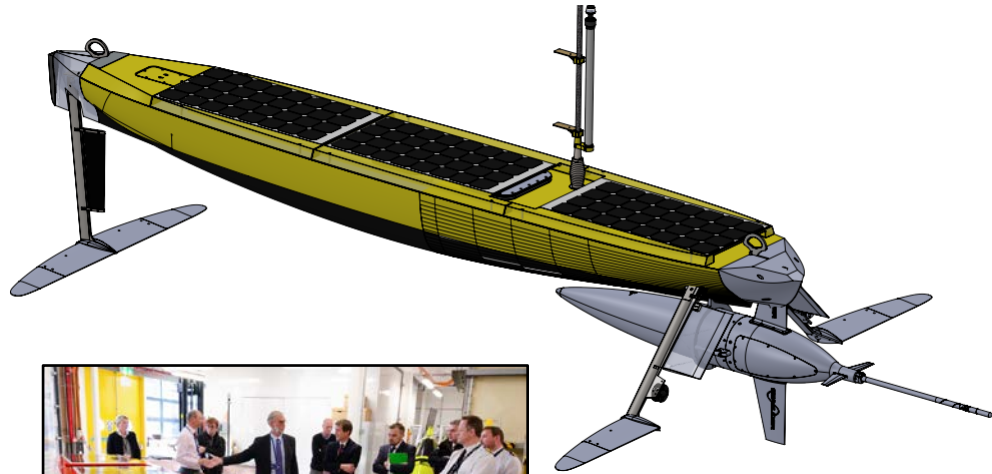
- ✦ surface wind velocity, air temperature and humidity, atmospheric pressure, longwave and shortwave downwelling radiation

Seaglider profiling autonomous underwater vehicle

- ✦ Profiles of upper ocean temperature, salinity, solar radiation, chlorophyll fluorescence, dissolved oxygen



- ✦ Launch from slipway in Barbados, early January
- ✦ Travel to study region
- ✦ Release Seaglider
- ✦ Maintain time series with Caravela above glider
- ✦ Calibrate sensors against Eurec4a ships
- ✦ Calculate air-sea fluxes
- ✦ Ship recovers Seaglider
- ✦ Caravela returns to Barbados for recovery



Questions and comments

- ✦ What is the best location for our time series (lat and long)? How far is it from Barbados? Typical current speeds? (Caravela's speed ~ 1 knot)
- ✦ Could we have a berth or two on Meteor for recovery of the Seaglider and potential emergency recovery of Caravela?
- ✦ We anticipate profiling to 250 m with the Seaglider – one dive/hour
- ✦ Watch circle radius will be ~ 2 km

