

MetOcean

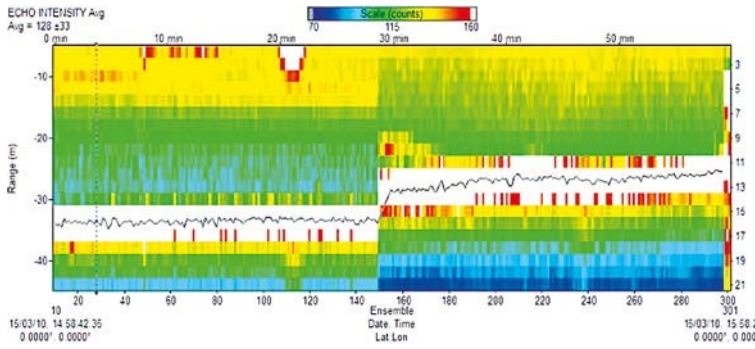
- METOCEAN 
- PASSIVE ACOUSTIC MONITORING 
- SURVEILLANCE 
- MARINE SURVEY 
- WATER QUALITY 
- COMMUNICATIONS GATEWAY 
- MARINE LIFE MONITORING 



The AutoNaut is ideally suited to long-term meteorological and oceanographic monitoring.

AutoNaut can both hold station (operating as a conventional weather buoy) and conduct survey transects. This enables the acquisition of data in otherwise unobserved regions. Its ease of deployment allows AutoNaut to rapidly replace non-functioning buoys and react to natural events of interest.

AutoNaut's MetOcean capabilities have been tested positively in collaborative trials with the UK's Met Office and National Oceanography Centre.



MetOcean

SENSORS

Weather station

The weather station is mounted on a mast <3m above sea level for measurement of:

- Wind speed
- Wind direction
- Barometric pressure
- Air temperature

Oceanography

Our multi-parameter system can integrate up to six oceanographic sensor modules such as:

- Conductivity, sea temperature and salinity
- Dissolved oxygen
- Chlorophyll
- pH
- Turbidity
- Dissolved organic matter

Acoustic Doppler Current Profiler (ADCP)

This hydro-acoustic system can fit a range of frequencies to measure currents by using the Doppler effect of soundwaves returned from particles within the water column.

In Development: Wave Measurement

For measurement of: wave height, direction and heave period.

AutoNaut

The AutoNaut is an unmanned surface vessel (USV) propelled forward by the motion of the waves. Patented *Wave Foil Technology* enables long-term mission duration. Powered entirely by renewable energy and with no requirement for offshore personnel the AutoNaut significantly reduces costs and safety risks at sea. Solar energy powers an extensive range of sensors and equipment for 24/7 operation.

- Unmanned operation: no offshore personnel at risk
- Powered by renewable energy: no fuel costs, no emissions
- Mission duration of several months
- Cruising speed of up to 4 knots
- Station keeping within 25 metres
- Storm-proven robustness
- Simple deployment/recovery from vessel or slipway
- Flexible payload and sensor capacity
- Data transfer



YSI EXO2 Sonde
multi-parameter sensor

Do you have other sensors to integrate?



<ossi> - AutoNaut's Open Source Sensor Interface provides:

- Easy, cost effective integration of sensors using various data protocols
- Customizable onboard logging and processing options
- Adaptable communications modules including: GSM, WiFi (2.4GHz & 5GHz), Iridium and Inmarsat Sat connectivity, Bluetooth)
- Open source - giving full control to the client