

Aanderaa SmartSub Observatory

Reliable and rational data collection

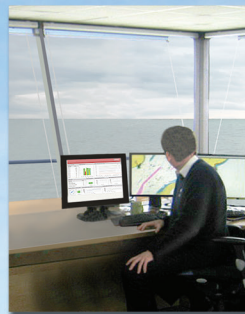
- *Longer life*
- *System Stability*
- *Lower Operating Costs*

The Aanderaa SmartSub Observatory

In collaboration with the University of Bergen, Aanderaa Data Instruments have developed the SmartSub Observatory, a flexible solution for repeatable deployments.

The SmartSub Observatory has the following attractive features:

- Easy deployment, retrieval and redeployment
- Long deployment time, typical 1-5 years
- Flexible, reconfigurable instrumentation options
- 3 depth ratings: shallow water, intermediate water, deep water
- Numerous possible applications:
 - stand alone with acoustic release,
 - stand alone with periodic data collection with acoustic modem,
 - full real-time solution with acoustic modem and satellite link
- Web based data display
- Fully protected instrumentation
- Designed for high current deployment



1000 m

Current Speed
and Direction



Temperature



Conductivity



2000 m

Oxygen Optode



Turbidity



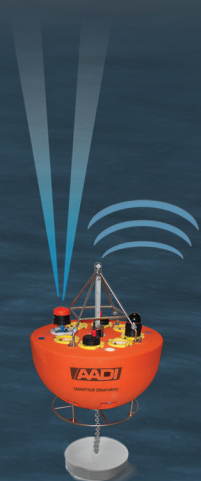
3000 m

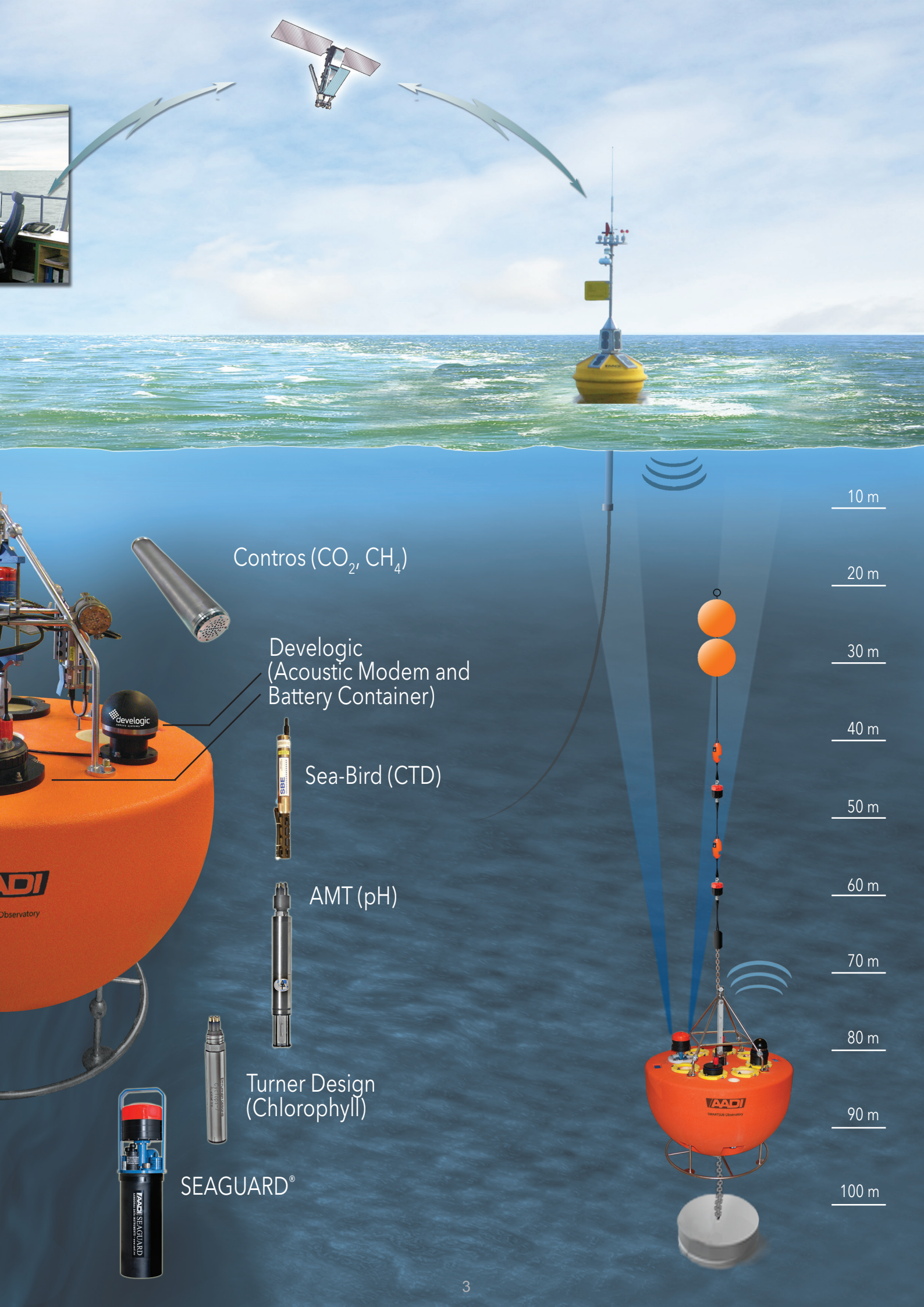
Pressure



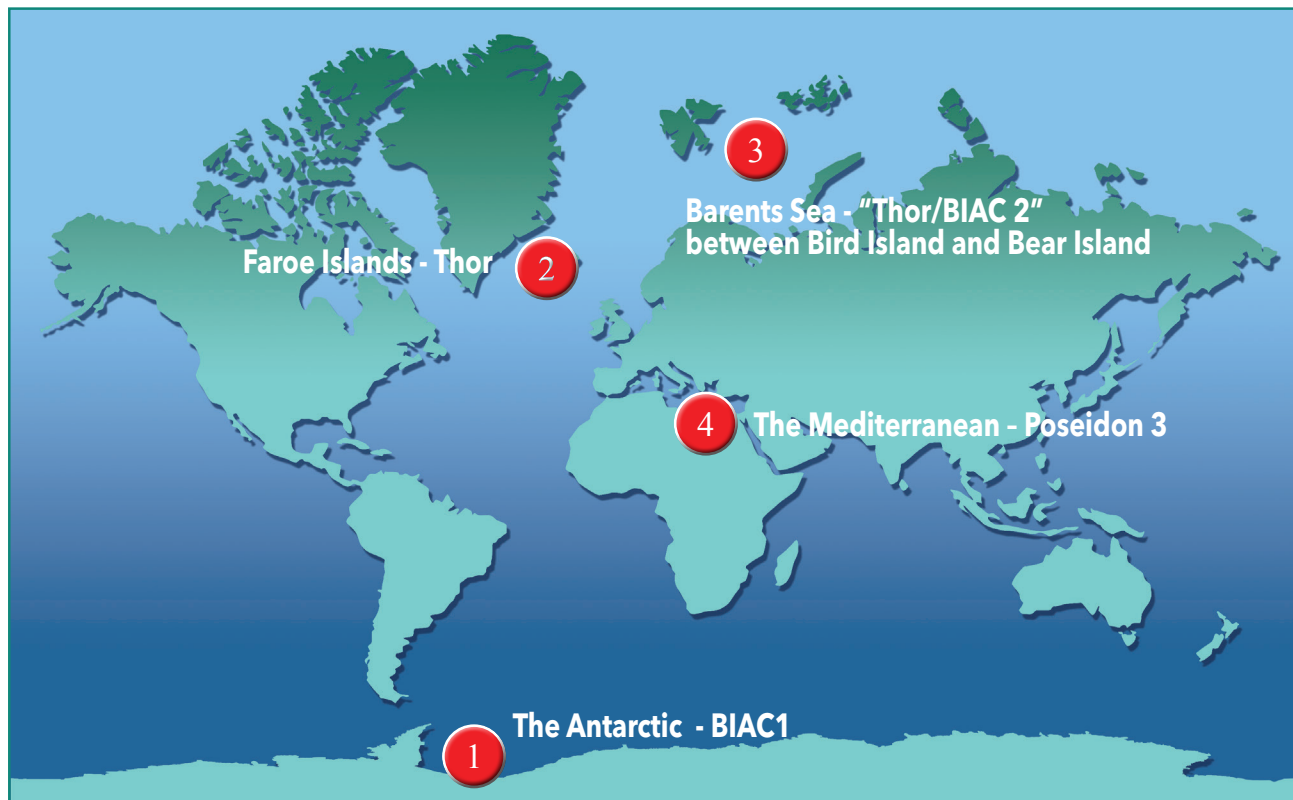
4000 m

Recording Doppler
Current Profiler
RDCP





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REFERENCES

1. Year 2009 (February): The Antarctic - BIAC 1. Bipolar Atlantic Thermohaline Circulation Equipment: RDCP with CTD, RCM 9 without current but with CTD, Acoustic Modem, Acoustic Release. 5 year battery pack.
User: Bergen University/Bjerknes Centre for Climate Research.
2. Year 2010 (May): Faroe Islands - Thor. Thermohaline Overturning at Risk Equipment: RDCP with CTD and Oxygen, Acoustic Modem, Acoustic Release. 3 year battery pack.
User: Bergen University/Bjerknes Centre for Climate Research/Bogi Hansen, Fisheries Laboratory.
3. Year 2010 (June) : Barents Sea – BIAC 2. Bipolar Atlantic Thermohaline Circulation Equipment: RDCP with Oxygen and CTD, Acoustic Modem, Acoustic Release. 3 year battery pack.
User: Institute of Marine Research.
4. Year 2012: The Mediterranean – delivered to Fugro OCEANOR Tsunami early warning system. Current speed/direction, water level, conductivity, salinity, temperature, oxygen, turbidity, pH, CO₂ and CH₄, Acoustic modem, Paroscientific pressure sensor, daily report of data via surface buoy and satellite link. 1 year on its battery pack of more than 6000Ah.
User: Hellenic Center for Marine Research (HCMR) - Poseidon 3

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