



Royal Netherlands Institute for Sea Research

# OFEG-TECH Southampton 22+23 nov 2011

## NIOZ recent developments



Marck G Smit  
Jack Schilling



## Program Pelagia



- Now: Mediterranean
- Dec 8<sup>th</sup>: port call Catania
- Jan/Feb/Mar 2011: charter Piston Coring Red Sea?
- Apr 2011: Red Sea for IFM-Geomar
- May/Jun 2010: North Sea/West Atlantic?





# Installation USBL: Kongsberg Hipap 100

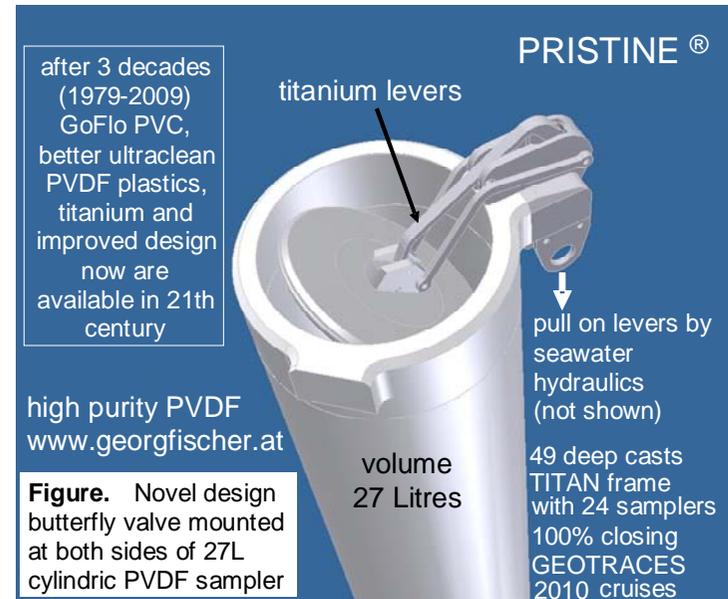
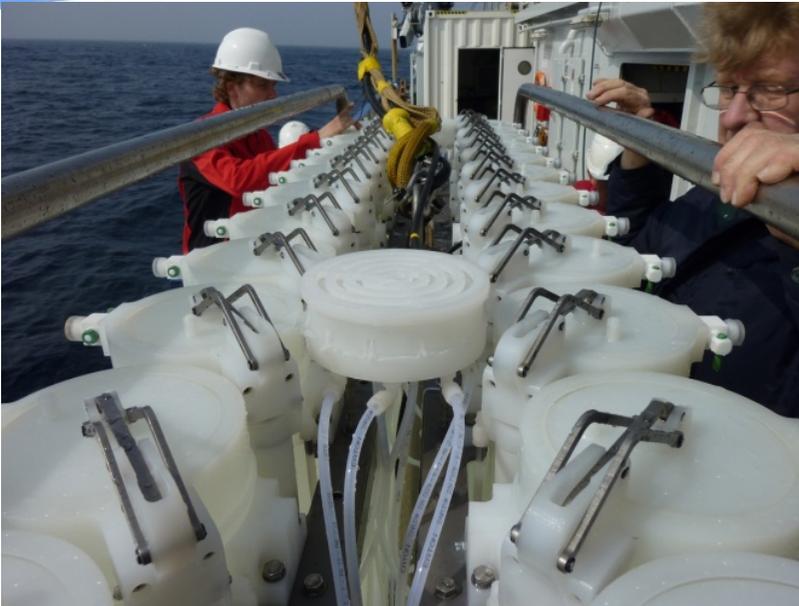


- Hipap 100
- Freq 12 kHz
- Range 10 km
- Operating beam +/- 60°





# PRISTINE: 21<sup>st</sup> century Ultra Clean water sampler fully operational



- Trace metal research
- PVDF plastic
- 24 x 27 ltr
- Large opening ratio
- reliable



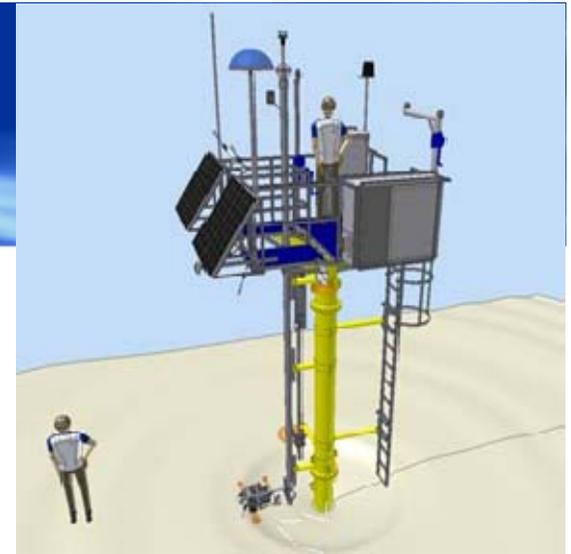
## Recent projects, example 3 Tidal flats monitoring pole

**Dept:** Marine Ecology

**Project:** IN-PLACE, Wadden Sea observatory

### Goals/results:

- Extensive instrumentation suit
- Vertical movements
- Minimal energy consumption
- Solar panels
- Bi-directional data link to NIOZ





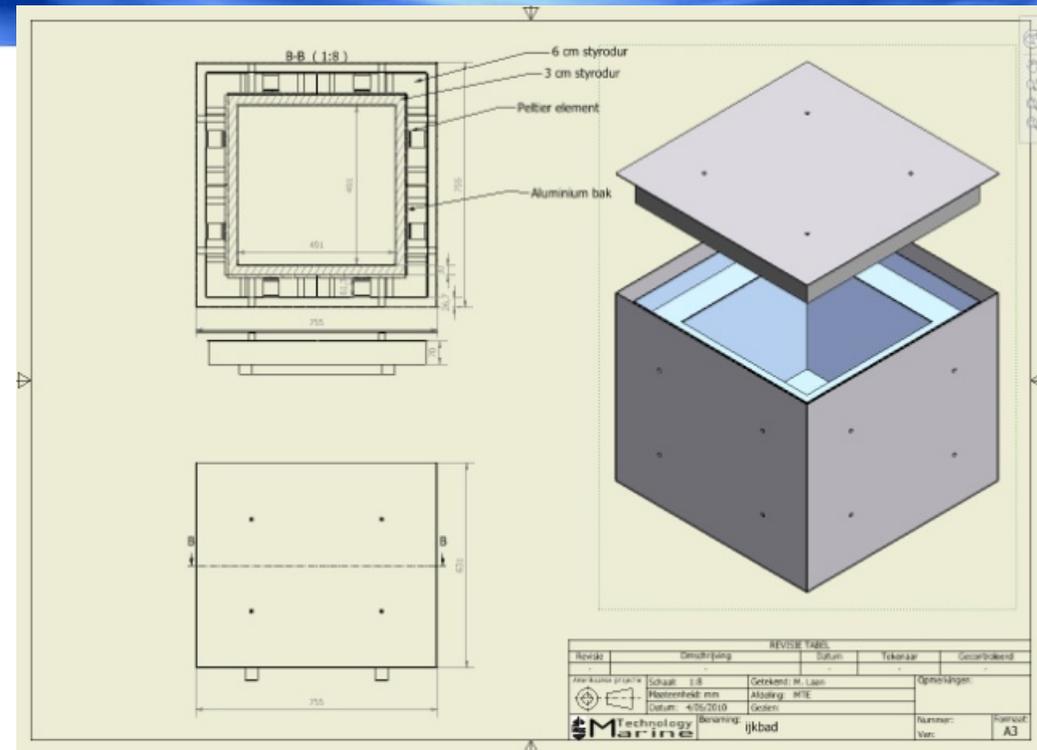
## A-frame for GEOTRACE cruise

- South Atlantic
- GEOTRACE cruise
- OFEG barter on board of the RV James Cook
- NIOZ Kevlar Cabled Clean winch was a prerequisite
- design and construction a special A-frame.





# High Accuracy Calibration tank



- For very accurate NIOZ thermistor strings
- Calibration down to 1 mK (0.001 ° C)
- 80 liter calibration tank
- calibration range from -2 ° C to 30 ° C
- stability of 1 mK.



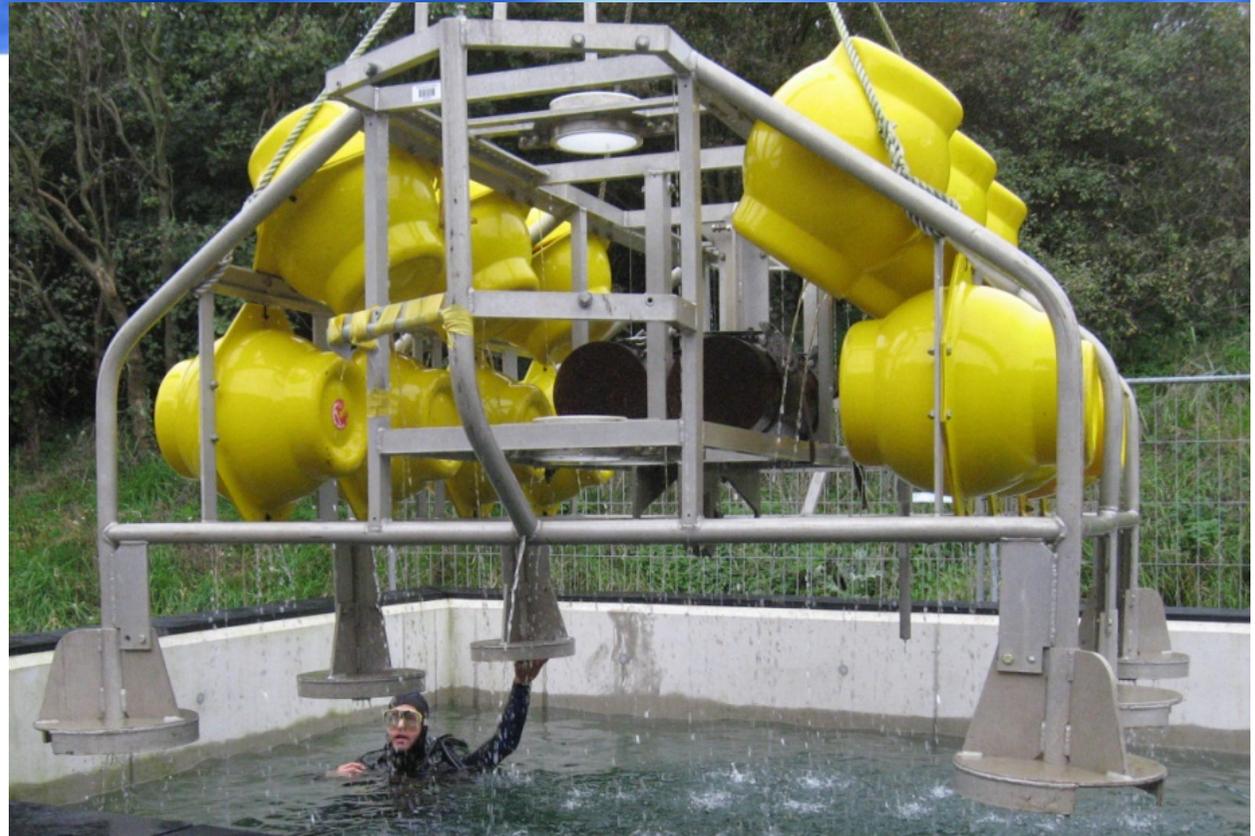
## New double capstan winch for mooring operations



- After mooring cruises on NERC ships
- Effective!
- Purchased copy of this Lebus winch



## New bottomlander test basin



- Testing bottom landers
- Testing seagoing instruments and equipment
- 5 x 5 x 5 m
- Water treatment installation



# Antarctica Labs on Rothera Station

- NIOZ builds 5 lab container for Netherlands Antarctica programme



- Jan 9<sup>th</sup> 2012: delivery at Southampton
- Opening: Jan 2013



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Thank you,  
questions?

