

# FLANDERS MARINE INSTITUTE'S (VLIZ) RESEARCH INFRASTRUCTURE NETWORK IN THE BELGIAN WATERS... & BEYOND

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Vlaams Instituut voor de Zee vzw  
Flanders Marine Institute

# Layout

- About VLIZ
- VLIZ Research Infrastructure
- VLIZ & ESFRI
- North Sea Research & Monitoring Network
- ... & Beyond

# VLIZ

Vlaams Instituut voor de Zee vzw  
Flanders Marine Institute



- Flemish Government NPO est. 1999
- 64 Employees
  - Research infrastructure
  - Data management and marine library
  - Policy information
  - Communication & Outreach



# VLIZ – Research Infrastructure

## *RV Simon Stevin*



Length: 36

Beam: 9.4

Draught: 3.5 m

Photo courtesy of the BENTHIS campaign June 2014

VLIZ: Science programme and scientific equipment management  
DAB VLOOT: Ship operations and crew management

# VLIZ – Research Infrastructure

## *ROV Genesis*



- Cherokee
- Max. Depth 1500 m
- Equipped with TMS



ROV Manager: Wim Versteeg



# VLIZ – Research Infrastructure

## *Marine Station Ostend*

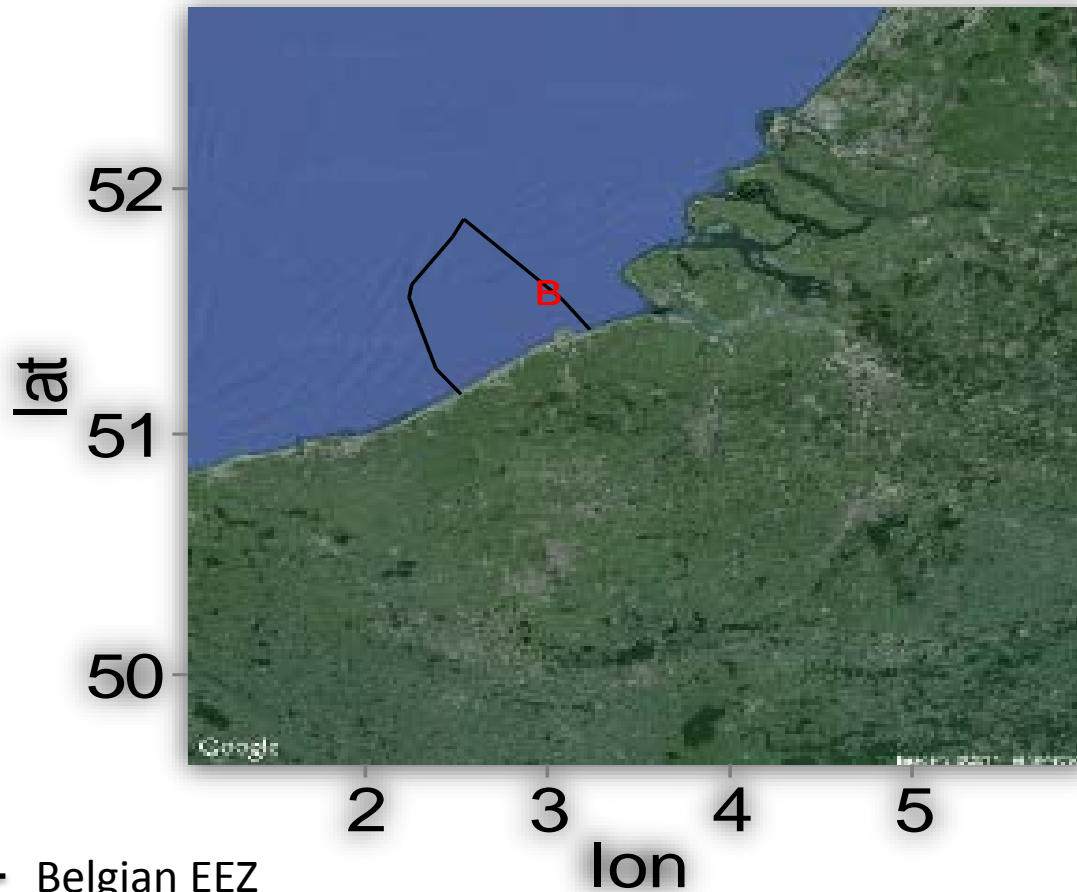


- Marine Biology & Chemistry labs
- Electronics workshop
- Core repository
- Equipment storage
- ROV Hangar

# VLIZ & ESFRI

- Financial support by the Flemish Government
- VLIZ participation in ESFRI projects
  - Integrated Carbon Observation System
  - *LifeWatch*
  - ....
  - European Marine Biological Resource Centre

# North Sea Research & Monitoring Network



— Belgian EEZ

**B** North Sea Data & Monitoring station  
(Noord Zee Observatorium)



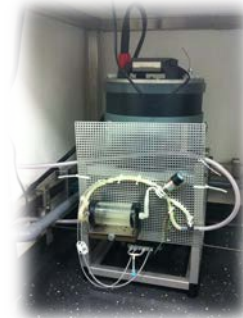
# RV Simon Stevin

- Fisheries research
- Coring
- ROV Genesis testing

pCO<sub>2</sub>



Flow Cytometer



FRRf



Operations



- Nutrient Analyser
- Fluorometer



SPI



SBE19 & SBE 25 CTD's

- Multibeam
- ADCP
- Sound velocity profiler

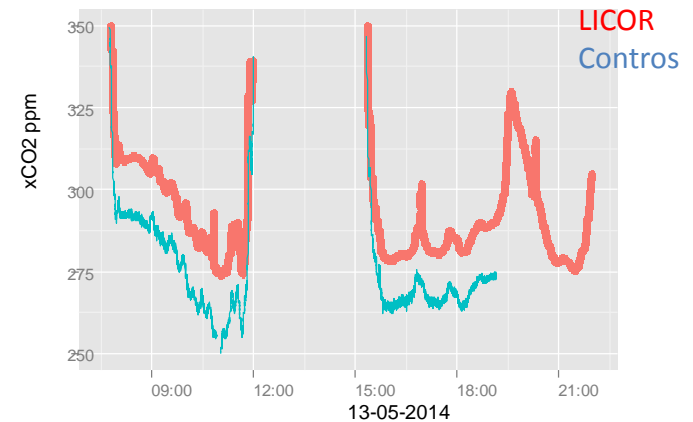
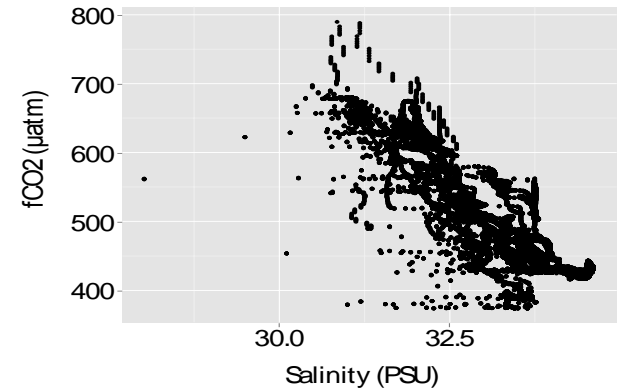
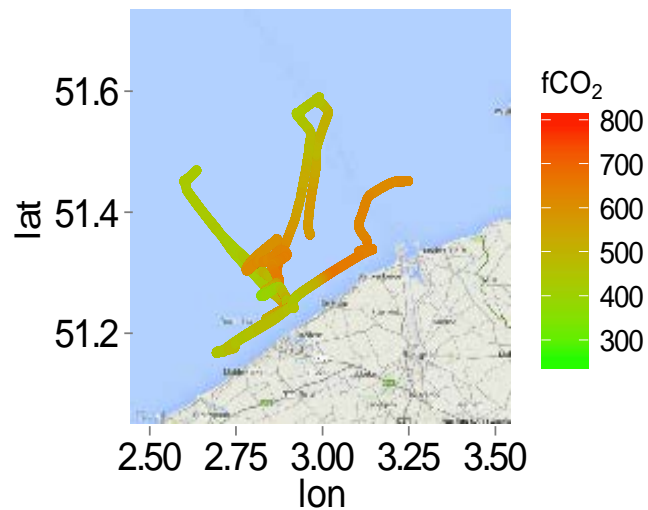
# Data - Products

*RV Simon Stevin is equipped with a custom Data Acquisition System (DAS)*

## Marine Information and Data Acquisition System

### Lifewatch

#### ICOS

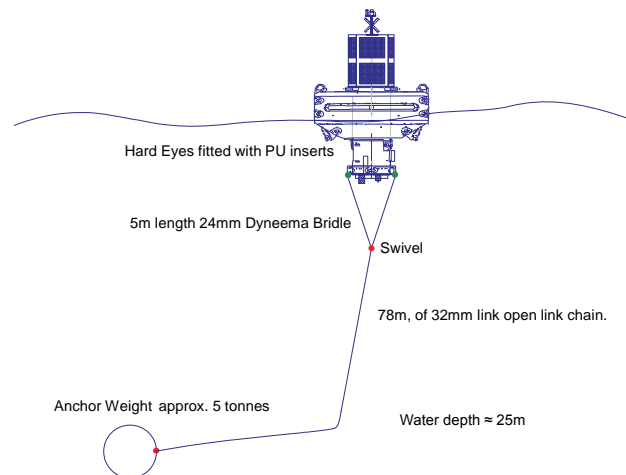


# North Sea Data & Monitoring Station (Noord Zee Observatorium)

C Power Thornton Bank Wind farm



Buoy is located between a WTG and an artificial reef



# North Sea Data & Monitoring Station (Noord Zee Observatorium)

## *Sensors*

- Aanderaa Seaguard
  - O<sub>2</sub>, RCM, CTD, Chl-a
- Systea WIZ (Nuts)
- ProOceanus – proCO<sub>2</sub> atmosphere
- Sensorlab SP101 pH sensor
- Vemco VR2C receiver
- C POD passive acoustic receiver

*Data transmission: WiFi*

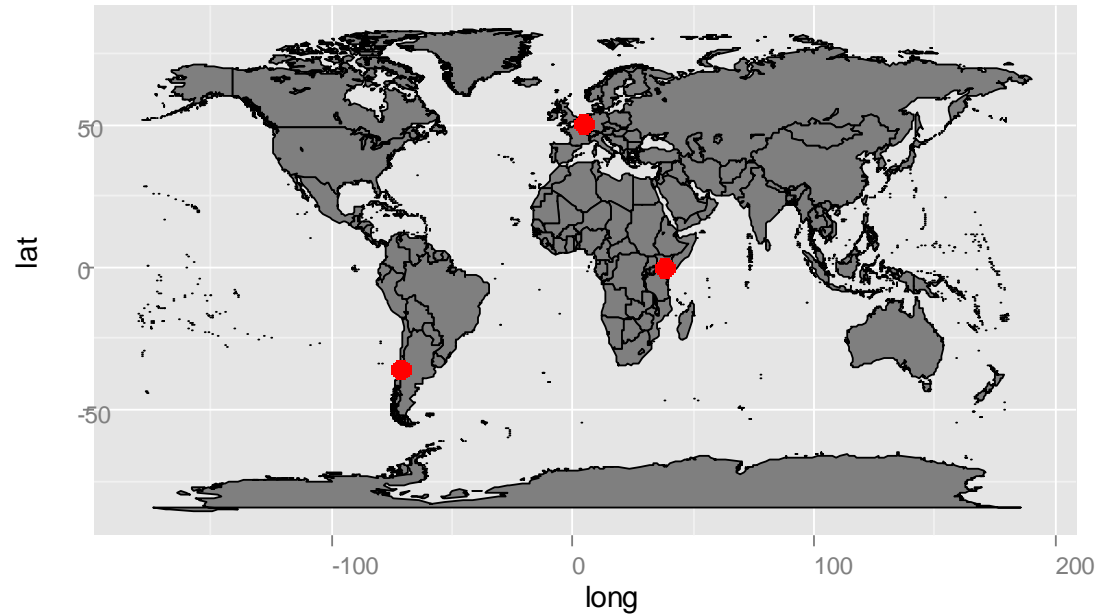


... But North Sea hides surprises



# ... & Beyond

- The Netherlands  
NIOZ: Ongoing collaboration



- Chile  
ICOS - Univ. of Valparaiso & FOCA project  
FerryBox from Valparaiso to Patagonia
- Kenya  
KMFRI on going collaboration  
Use of the RV Mtafiti



# Conclusion

- Belgian marine area is small but VLIZ provides a very comprehensive coverage
- Sophisticated and versatile equipment
- High quality data products
- Dedicated personnel



***AIM***

***Provide the necessary means for high quality marine research***

**Thank you!!**

