AUTONOMOUS UNDERWATER VEHICLE

NEW RESEARCH FLEET .NL

Available in 2024 for all scientists in the Netherlands via NMF National Marine research Facilities pool

Specifications

- Mid depth AUV
- Depth rating: ~ 1,500 m
- Subsea scanning at a close distance
- High-resolution measurements
- Endurance up to 24h
- Wide array of sensors

Possibilties

Physical Oceanography:
- Ocean Observatories
- Climate Change
- Under Ice

Marine biology:
- Fisheries research
- Habitat mapping
- Aquaculture

Environmental monitoring:
- Offshore wind
- Offshore oil & gas

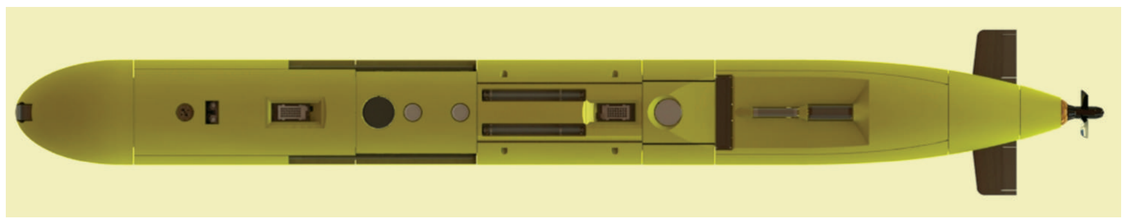
Seafloor investigation:
- Marine archeology
- Deep-sea ecology
- Sea bottom investigation/bed-forms

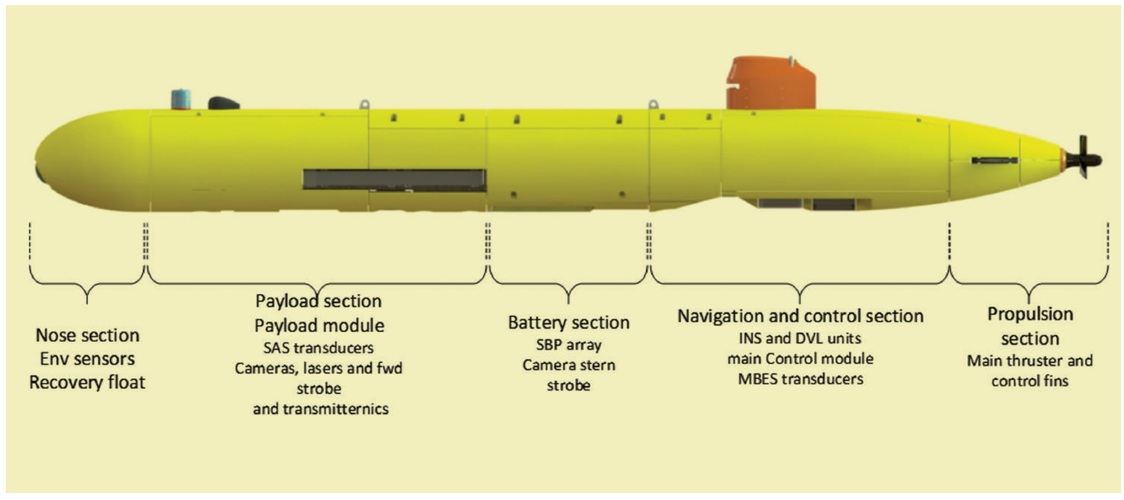
‘Standard’ sensors

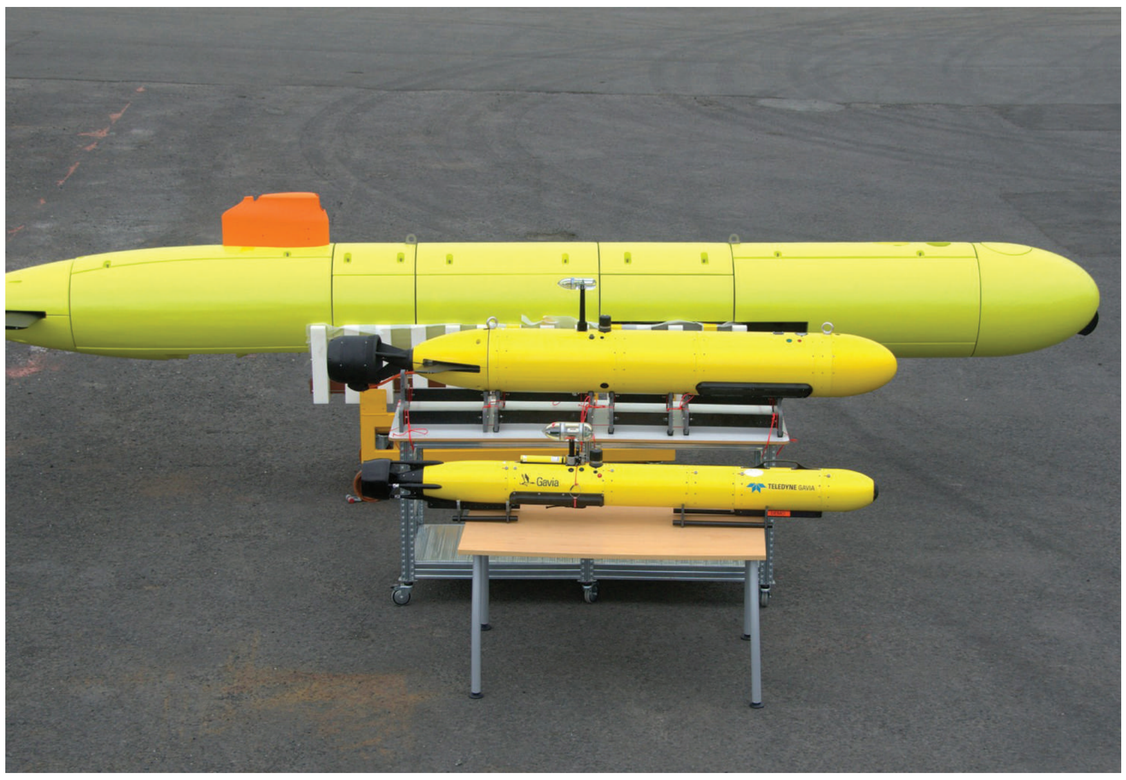
- CTD pumped
- CTD non-pumped
- O2 optode
- Chlorophyll/ turbidity/CDOM
- Side scan sonar
- Synthetic aperture sonar (SAS)
- Stills camera + flash
- Video camera + light
- Echo sounder
- Multi beam echo sounder
- Altimeter
- Upward looking ADCP
- Downward looking ADCP
- Nitrate
- pCO2
- PAR

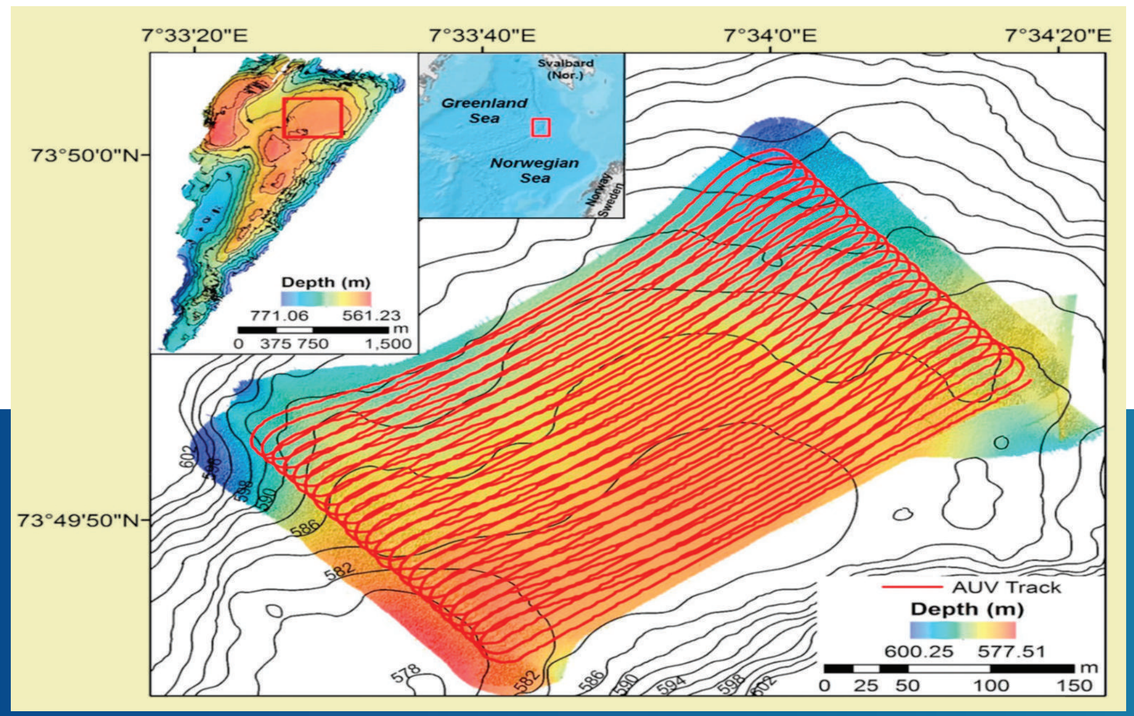
Special sensors

- Forward looking pencil beam sonar
- EK80 mini scientific echo sounder
- Sub bottom profiler
- Micro turbulence
- pH
- Methane
- Hydrophone
- 3D laser scanner
- Metal traces
- FRRF
- Radiometer
- Fish tag detection
- Hydrocarbons/ sewage/pesticides
- And more…

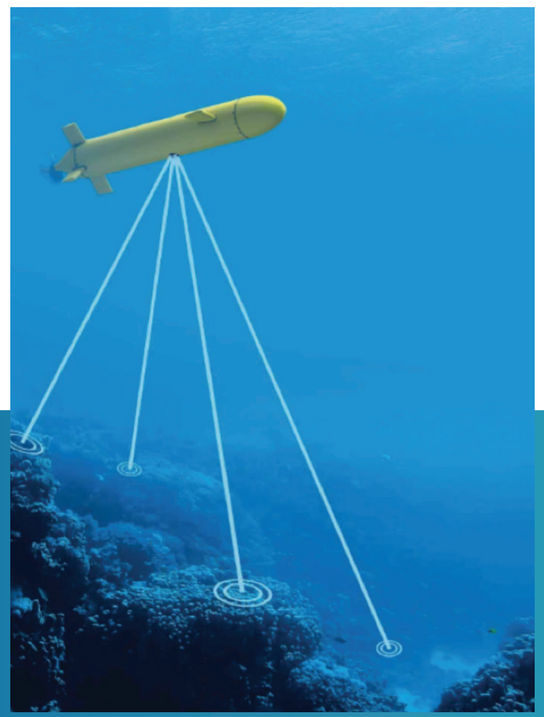








Source: Meyer et al. 2019



More information, questions or ideas? Ask Marck.Smit@nioz.nl

AUV core team:
Furu Mienis, Bob Koster, Lorenz Meire, Bas Denissen, Leon Wuis, Yetzo de Hoo, Marcel van der Linden (controller), Marck Smit (project leader)

Part of the GWI-project Mobile Equipment for: RV *Anna Weber-van Bosse*, RV *Navicula*/*Wim Wolff* and RV *Pelagia*.

Co-applicants and in advisory group:
RUG, UU, UvA, Naturalis, VU, KNMI, TUD, NIKHEF, WUR, TNO en UL.

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