



From Shore to Open Sea:



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a vessel size adapted educational concept for
shipboard training

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- **WHY shipboard training ??**



Working on a research vessel has become a rare opportunity



Due to time issues instruction on board by supervisors are rare



But it is essential for understanding the „matter ocean“, methodological pitfalls and sampling issues



Especially, in countries with low or emerging economies opportunities are lacking



Beneficial for all: scholars, teachers, crew members





types and sizes of vessels



- Not just difference in size of vessels, BUT
 - difference in duration, all in common:
 - spatial range
 - scientific purpose
 - and opportunities
- hands on experience / training under „real life“ conditions
 - application & courses on methods and protocols of low cost devices as well as expensive devices
 - easy accessible application procedure, advertise via social media and webpages
 - webportal
 - independent reviewing process of applications
 - involvement of crew
 - alumni network







small vessels with coastal range



about 4 – 15 m

- one topic per one cruise unit (hours or day) e. g. fisheries, deployment of physical oceanography sensors, phytoplankton
- Post-processing in a local lab
- Capacity  to  participants
- Direct contact with marine environment





about 15 – 45 m



- **From planning to data evaluation**

- Proposal for shiptime, incl station planning
- Preparation of expedition
- Conducting and sampling
- Data management
- Data processing
- **Multidisciplinary approach**
 - night shifts
 - Living and working on board
 - Facing challenging weather conditions
 - Stressful situations



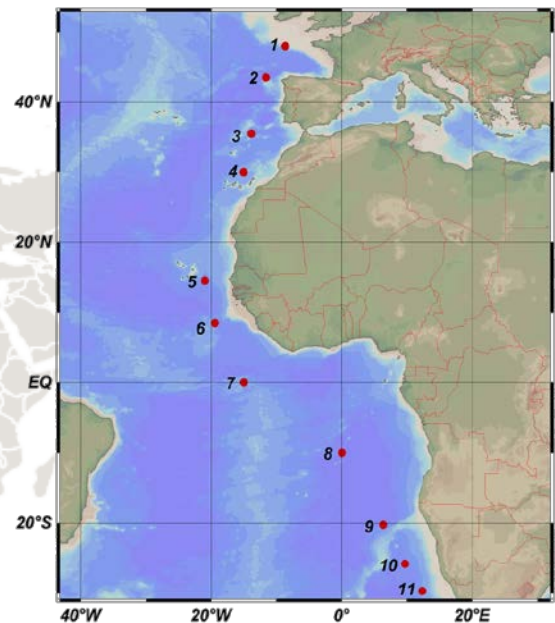
big size vessels



about 15 – 45 m

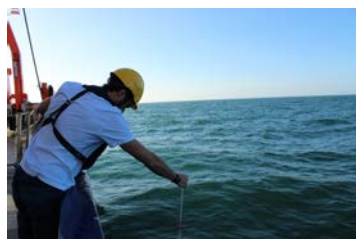


- Training on board a large research vessel (e.g. RV Polarstern)
- 3-5 weeks, larger distances
- 25-35 scholars per cohort (out ~750 applications), large pool of teachers (7-10 persons)
- Expeditions in 2015, 2016 and 2019 already started, next planned in 2022 onwards





- Training with a rotating module scheme
- Different modules incl. outreach and science communication topics



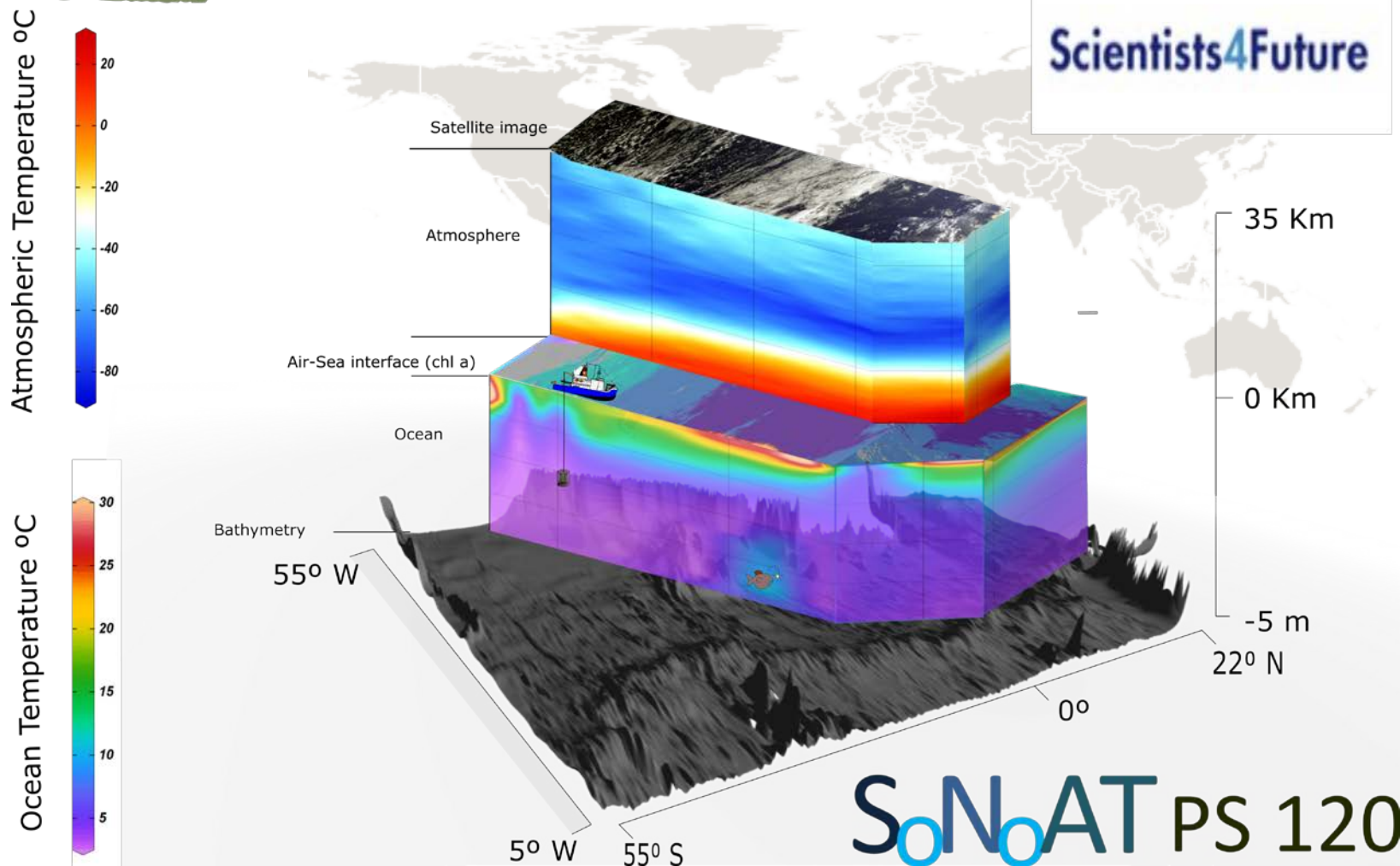


big size vessels



- Different modules lead at the end to a holistic understanding

Scientists4Future





According to UN Ocean Decade objectives

- Capacity building
- Knowledge transfer
- Transdisciplinary
- Early Career Ocean Professionals





Thank you for your attention



We aim to train ocean experts to address the sustainability of our global ocean, promoting excellence and moral sounding