# Endurance22: Using ocean observing platforms to inspire learners

<u>Tamaryn Morris</u><sup>1</sup>, Tim Jacob<sup>2</sup>, Colin Teague<sup>2</sup>, Thomas Mtontsi<sup>3</sup> and John Shears<sup>4</sup>

<sup>1</sup>South African Weather Service (Cape Town, South Africa)

<sup>2</sup>Reach the World (New York, USA)

<sup>3</sup>South African Environmental Observation Network (Cape Town, South Africa)

<sup>4</sup>Falklands Heritage Trust (Falklands)

### Presentation layout

- 1. Sir Ernest Shackleton and The Endurance22 cruise
- 2. Deploying ocean observing systems
- 3. Engaging schools through Reach the World and the South African initiatives
- 4. How to connect to the project?





Robert Harding Picture Library Ltd/Alamy

### **Antarctic search for Shackleton's Endurance**

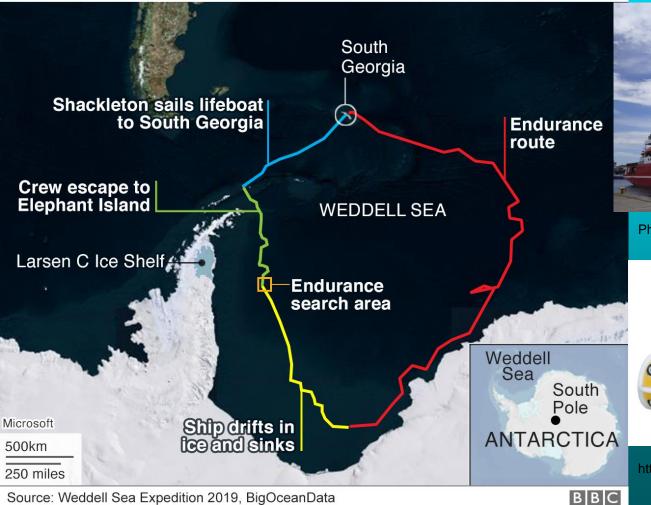
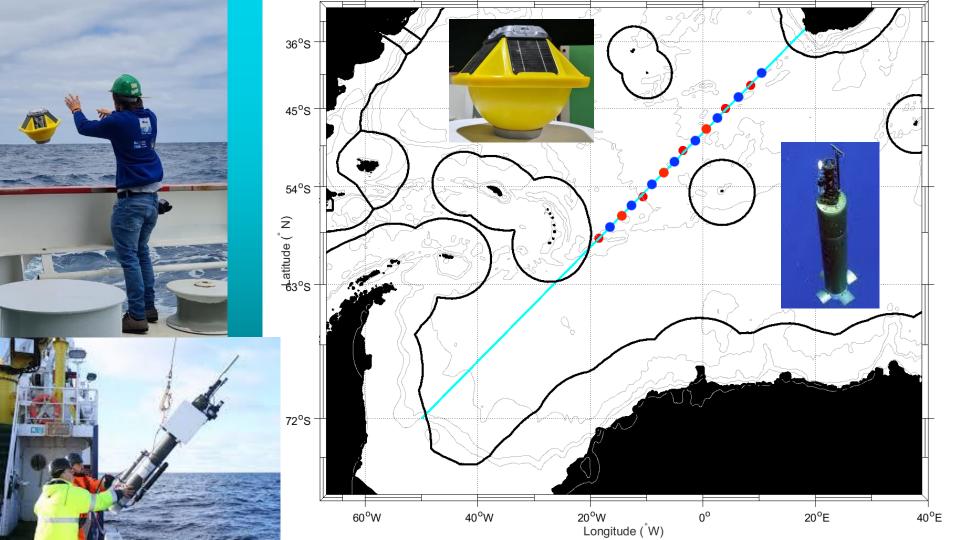




Photo: Marcel van den Berg



https://www.saab.com/









Field Notes



Journals



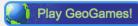
#### Endurance22 **Expedition to** Antarctica











#### **Endurance22 Expedition to Antarctica**

#### Current Location

#### Toulon, France

More than 100 years after Ernest Shackleton's ship, Endurance, sank off Antarctica, a team of underwater search experts is going back to find it! Join the expedition at explore.reachtheworld.org.



#### Logbooks

No content of this type available yet.



#### **Journals**

#### Deep-Water Trials in France

AUV expert Chad Bonin is back from deep-water marine robotics trials in France. Let's hear how he and the E22 sub-sea team used creative problem-solving to prepare for the Weddell Sea.



#### Field Notes

#### Antarctic Wildlife: Penguins

Endurance22 Director of Exploration Mensun Bound grew up in and around the Falkland Islands, and here he introduces the remarkable wildlife of the Antarctic-starting with the loveable penguin!



#### (3) Albums

#### Livestream with AUV Expert Chad Bonin (Recorded)

AUV expert Chad Bonin is back from deep-sea trials in Toulon, France, and he's ready to share how the Endurance22 sub-sea team used creative problem-solving to tackle unique challenges!





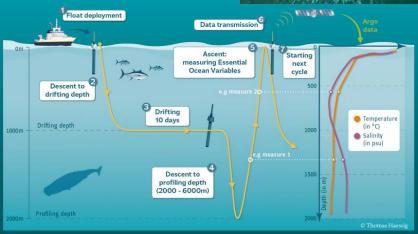
## South Africa's Adopt-an-Instrument initiative:

South Africa has seven coastal schools who have taken on Marine Science as a Grade10-12 subject, and Thomas (SAEON) works with additional Western Cape schools. These schools will "adopt" floats and Spotters, following their progress and using the data and information in their subjects.

### Subjects and topics with curricula the expedition relates to:

Mathematics Technology and Engineering Data science and coding Climate change Physical sciences, particularly Oceanography History Geography Social sciences and human interactions Exploration of our planet and our existence here





### How to connect to the expedition and the projects:

Reach the World: www.reachtheworld.org

Dr. Tamaryn Morris - tamaryn.morris@weathersa.co.za

Mr. Thomas Mtontsi - t.mtontsi@saeon.nrf.ac.za

"We hope that bringing this story to new generations will inspire them to explore, to overcome whatever challenges they may face, and to understand more about the Antarctic environment and how important it is even to those of us who live thousands of miles to the North," Donald Lamont, chairman of the Falklands Maritime Heritage Trust, which is funding the expedition.