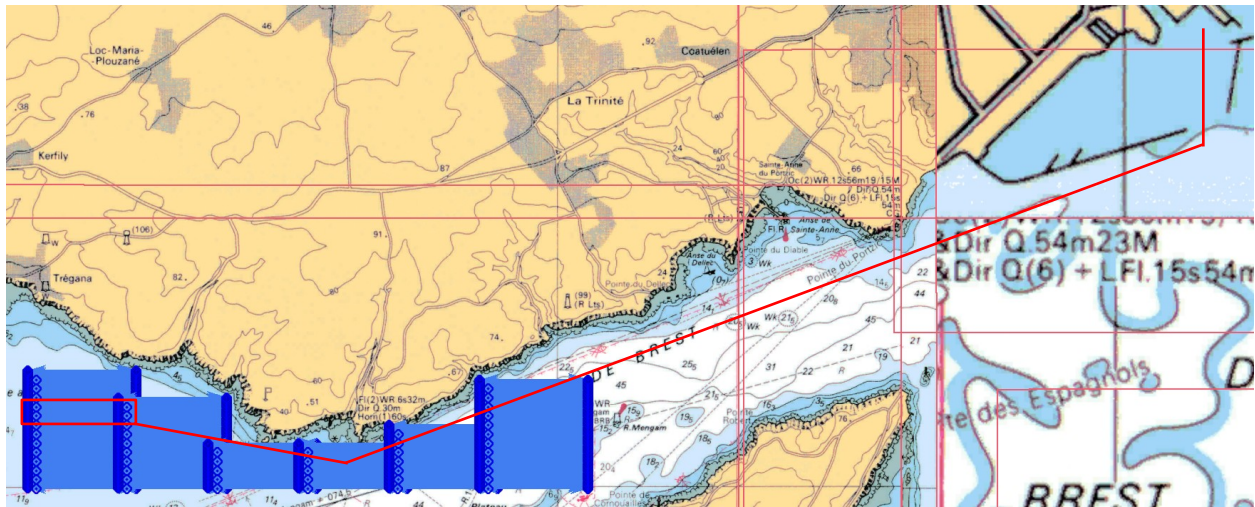# Boatbot Experiment May 31st 2019

Objective

- Test Hardware and Software of Boatbot
- Gather Magnetic, Sonar and GPS-Data on Brique 9
- Make note of bugs and problems in order to remove them

Area of Deployment

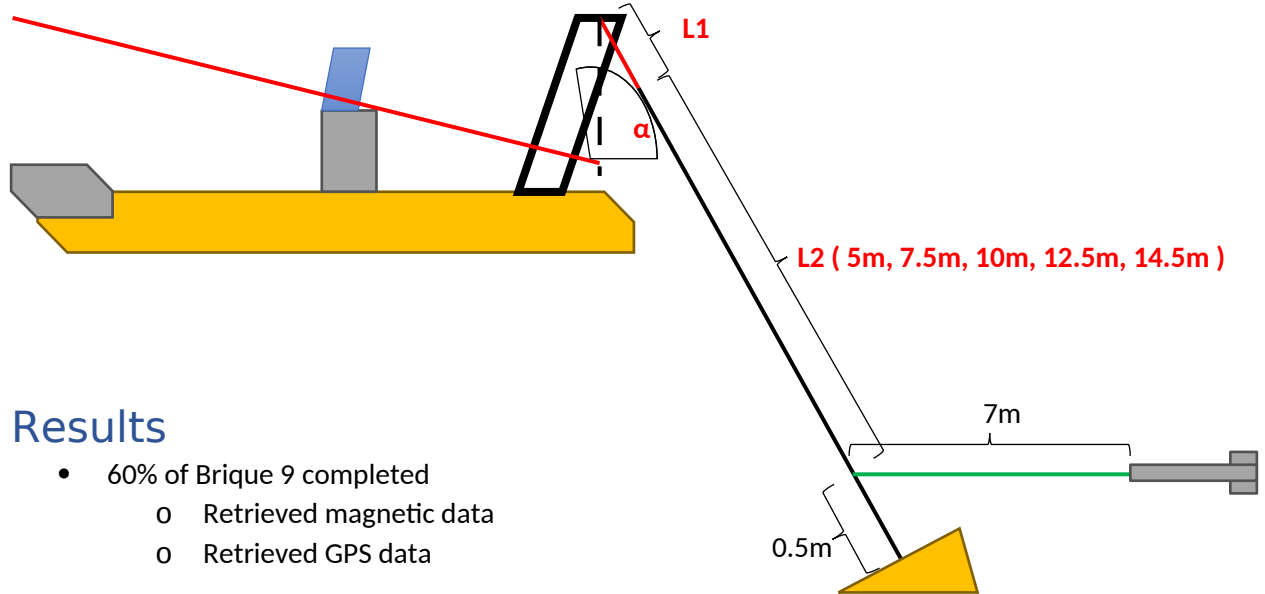Brique 9 of search area for La Cordelière and way from and to harbour

Participants

- Luc Jaulin (ENSTA)
- Calvin Lacher (External Intern)
- Josh Francis (External Intern)
- Corentin ? (Student)

Boatbot Setup

- L1 ≈ 0.5m
- L2 = 12.5m
- α ≈ 57°
- Big Controller Box
    - o   See config.yaml for controller setup
- Depressor
- Magnetometer
- IMU, GPS
- Navigation Computer (Boatbot)

- Data Computer (Hydro)

L1

α

L2 (5m, 7.5m, 10m, 12.5m, 14.5m)

7m

0.5m

Results

- 60% of Brique 9 completed
  - o Retrieved magnetic data
  - o Retrieved GPS data

Problems

- RTK-Connection not stable
- Depressor and magnetometer not visible in the sonar image
- Battery of magnetic data and sonar image recording computer ran out after only covering 60% of first brique
- Error on A/D-Converter of Magnetometer in after certain time. Only removable by rebooting sensor and recording program