Ocean exploration with robots

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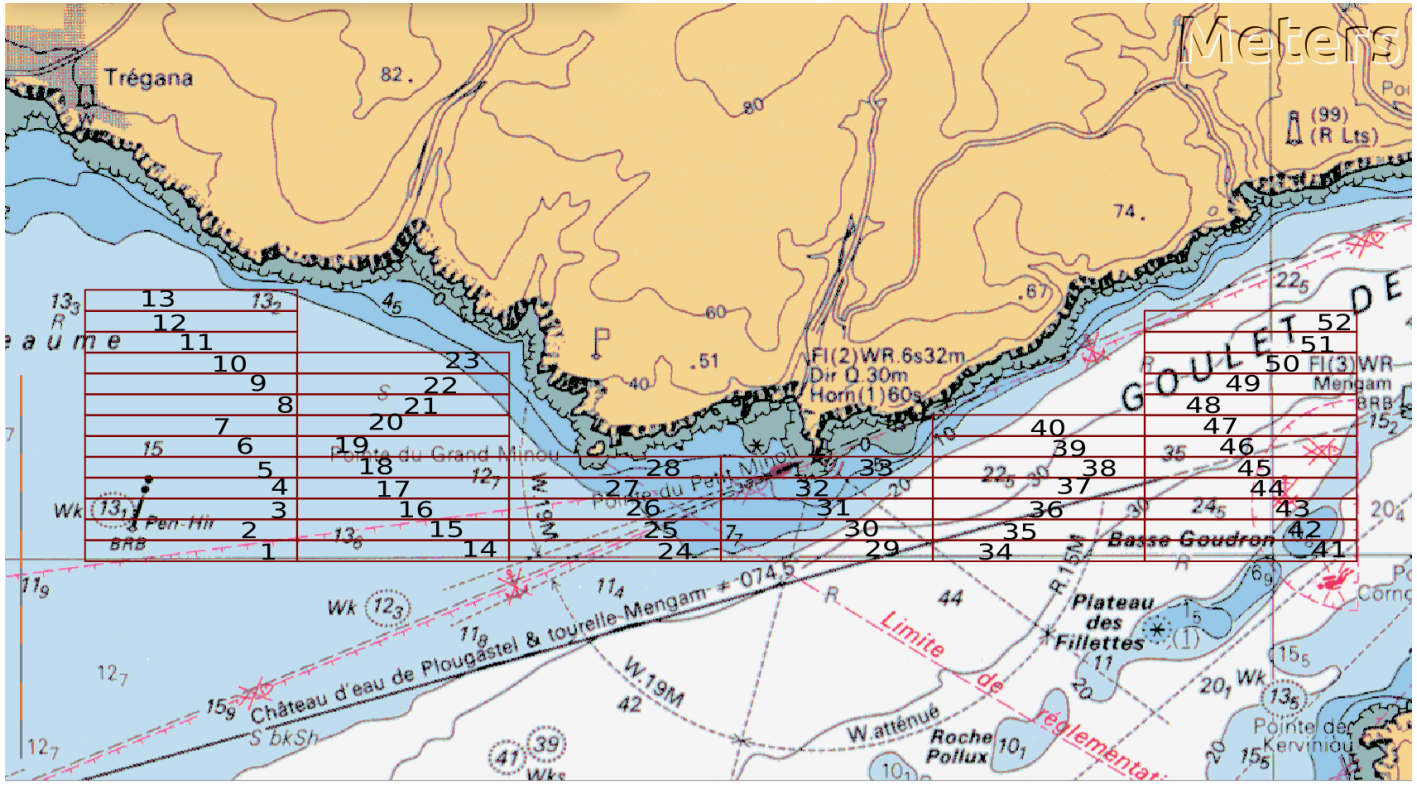
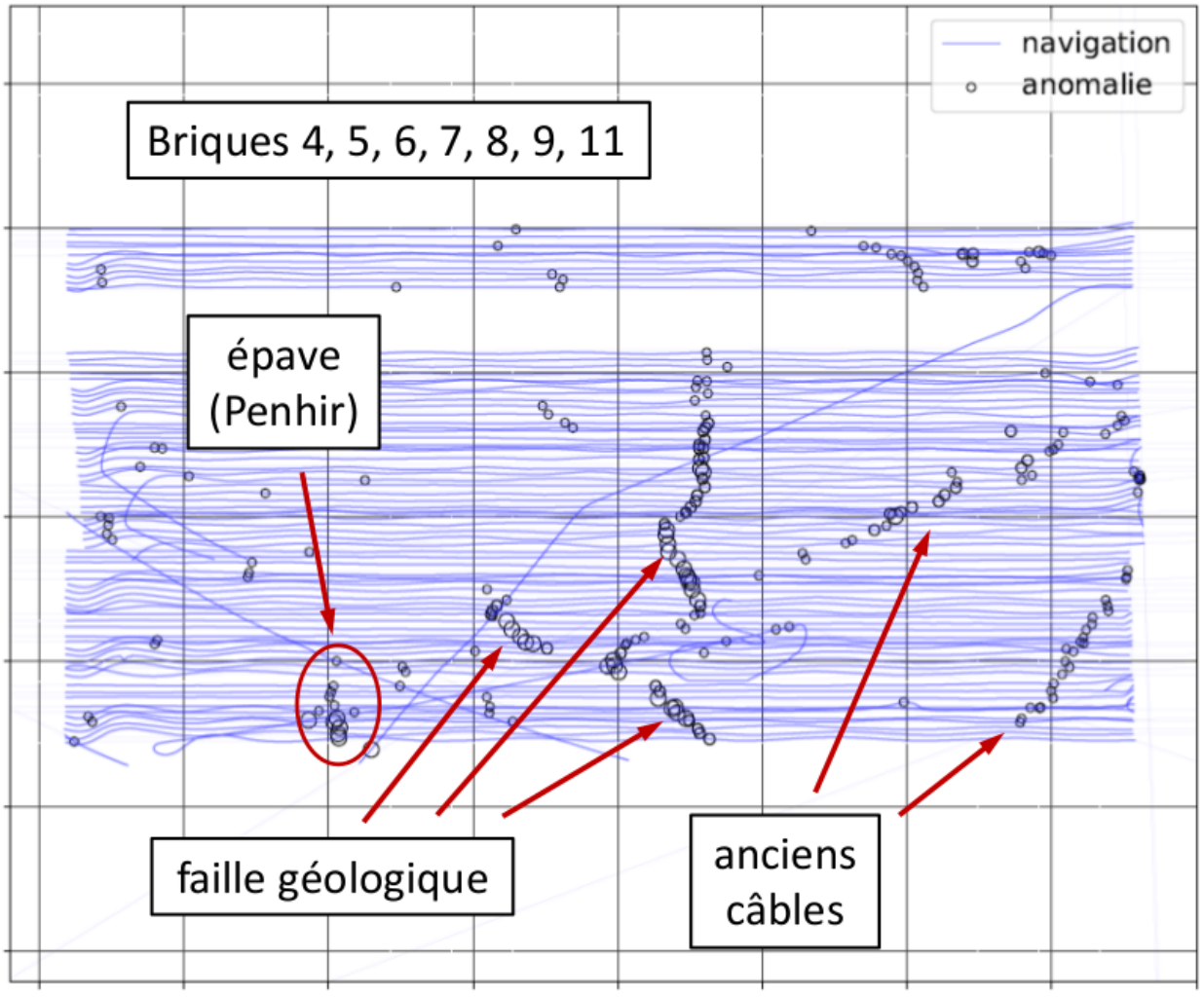
September 28, 2023,
Visite SIREHNA

1. Marine robots to build maps


Meters
Trégana
Fl(2)WR.6s32m
Dir Q.30m
Horn(1)60s
Pointe du Grand Minou
Pointe du Petit Minou
Basse Goudron
Plateau des Fillettes
Roche Pollux
Château d'eau de Plougastel & tourelle-Mengam
Limite de réglementa
W.19M
W.atténué
Pointe de Kerviniou
GOULET DE

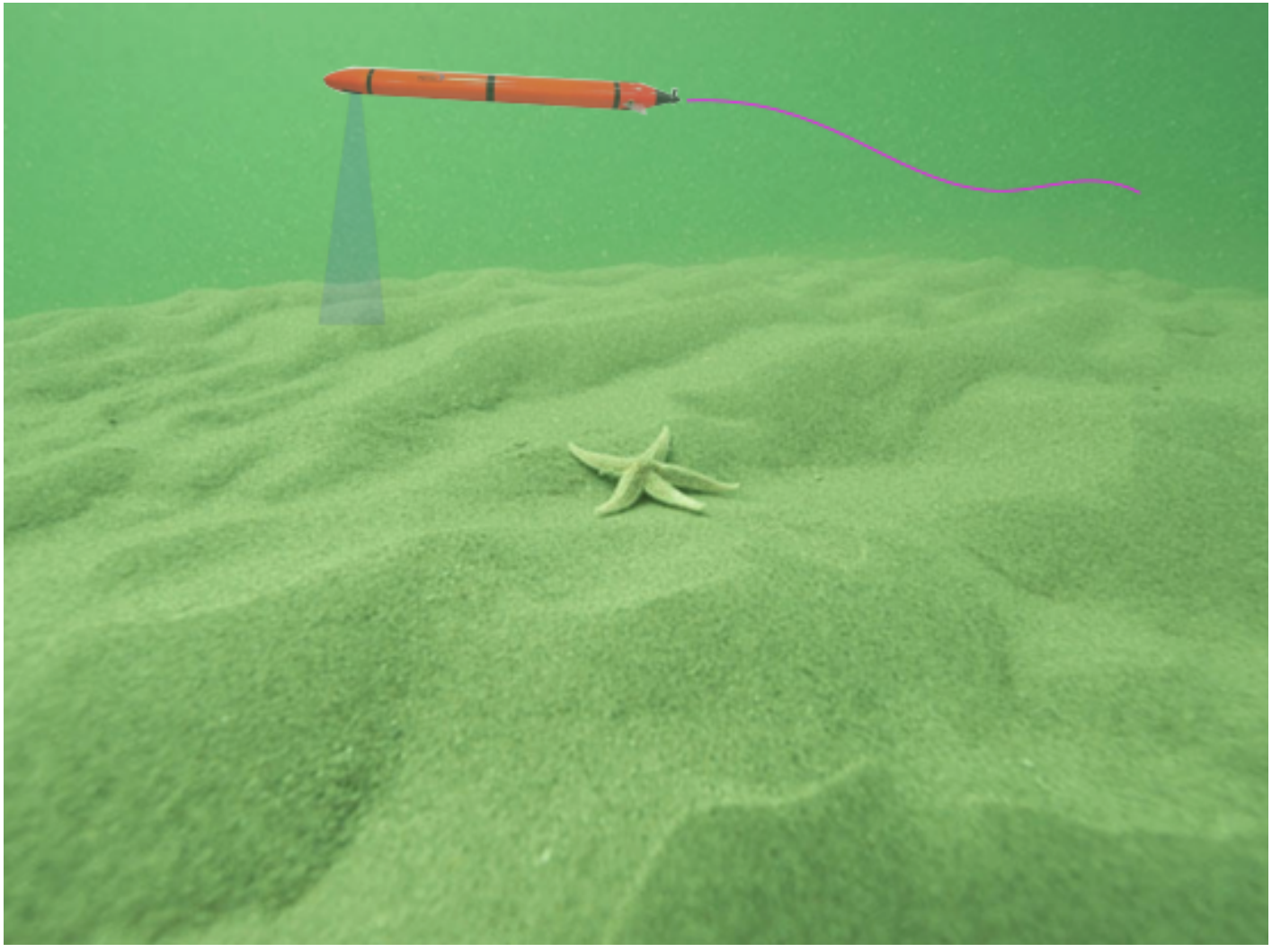

50

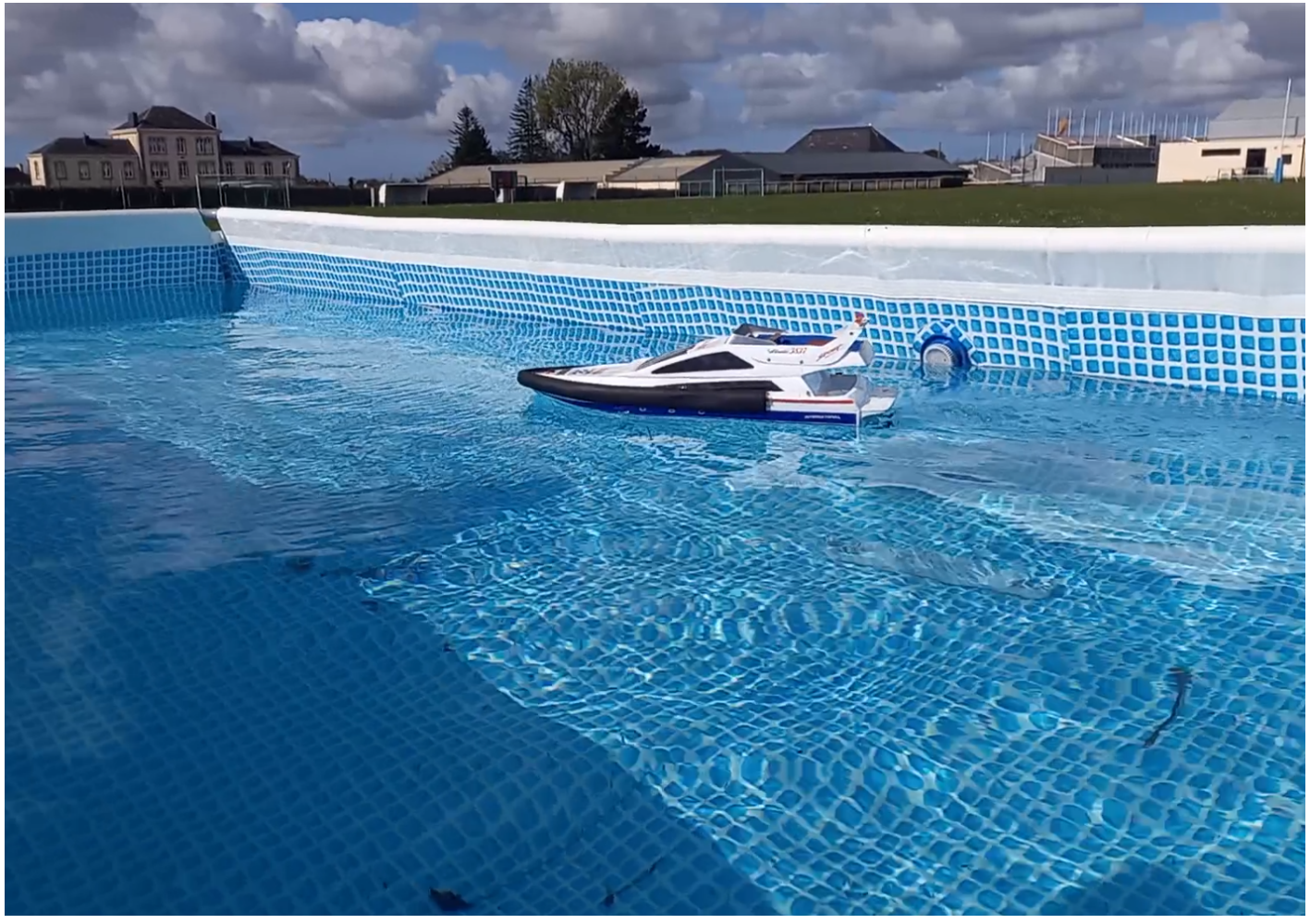


Magnetic map built in 2018

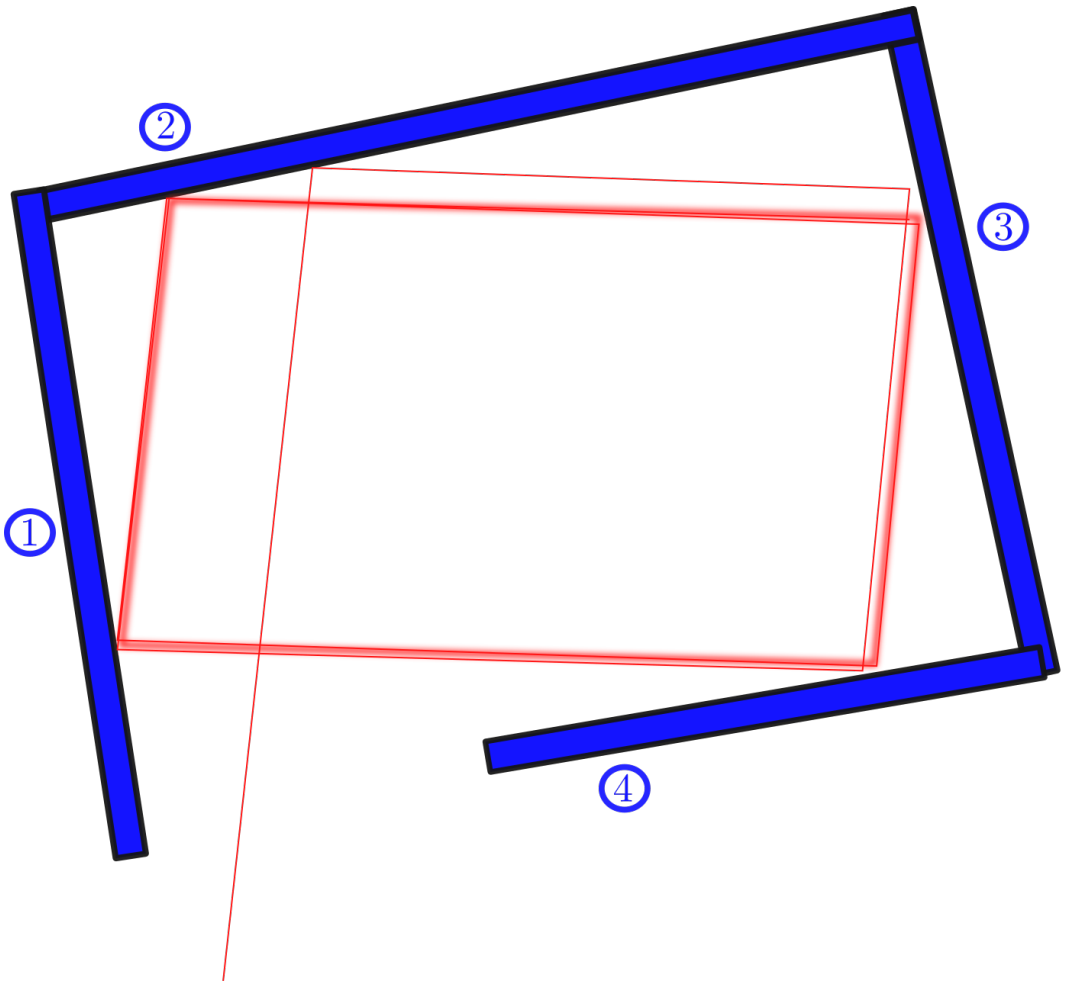
2. Cycle-based navigation

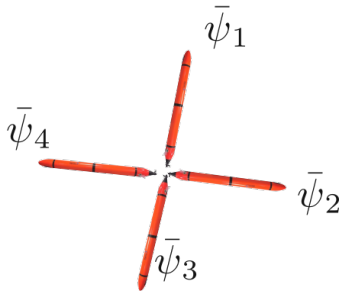
Submeeting 2018





youtu.be/TsvEUGa-XAs





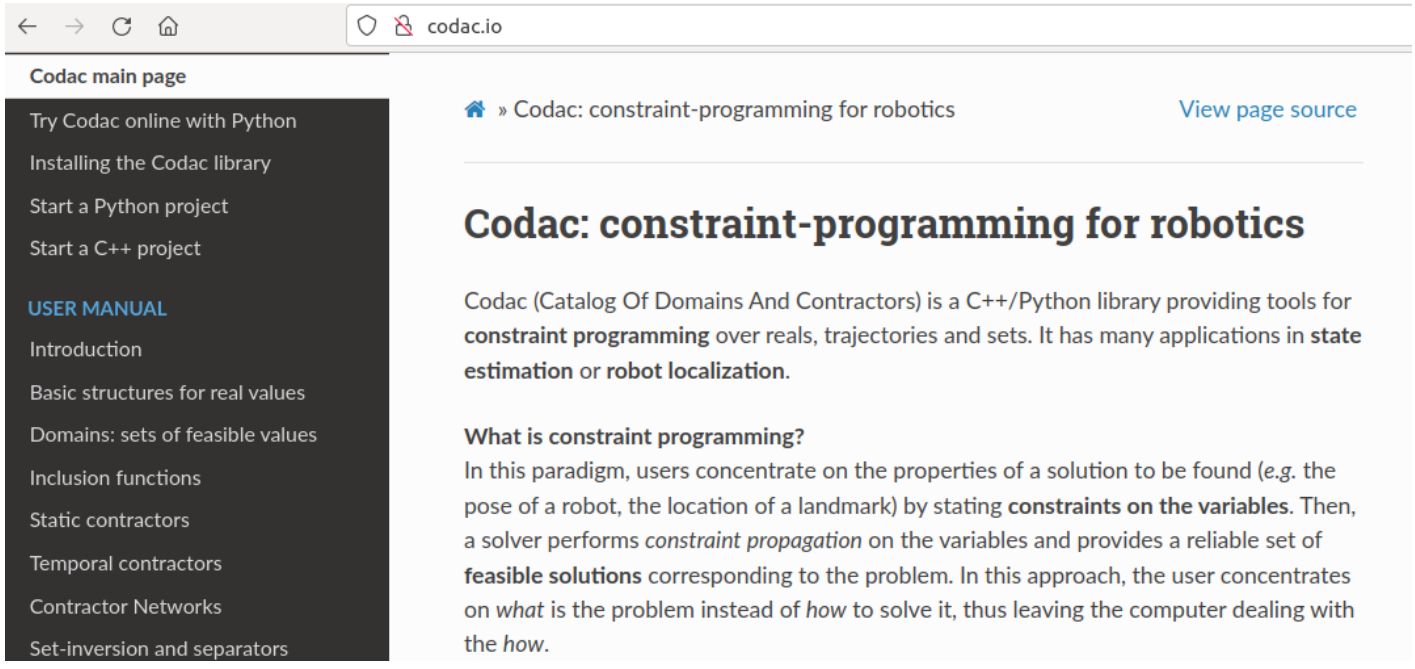
Find the route without GPS, compass and clock

3. Tools for validation

Given

$$\begin{cases} \dot{\mathbf{x}} = \mathbf{f}(\mathbf{x}) \\ \mathbf{x}_0 \in [\mathbf{x}_0] \end{cases}$$

Interval methods allow us to find an envelope for $\mathbf{x}(t)$.



An interval based library for verification in robotics