

22nd Conference of the Meso American - Caribbean Sea Hydrographic Commission

National Report by France (Shom)

[MACHC Member State]



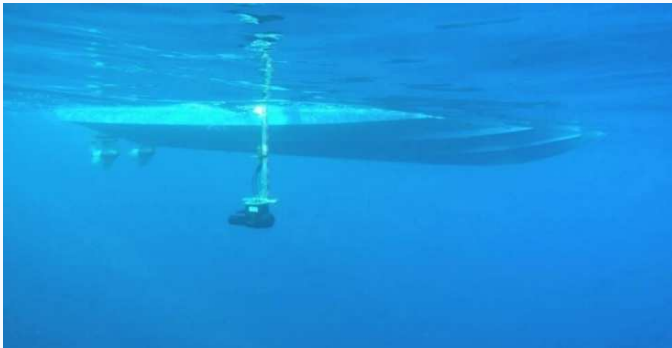
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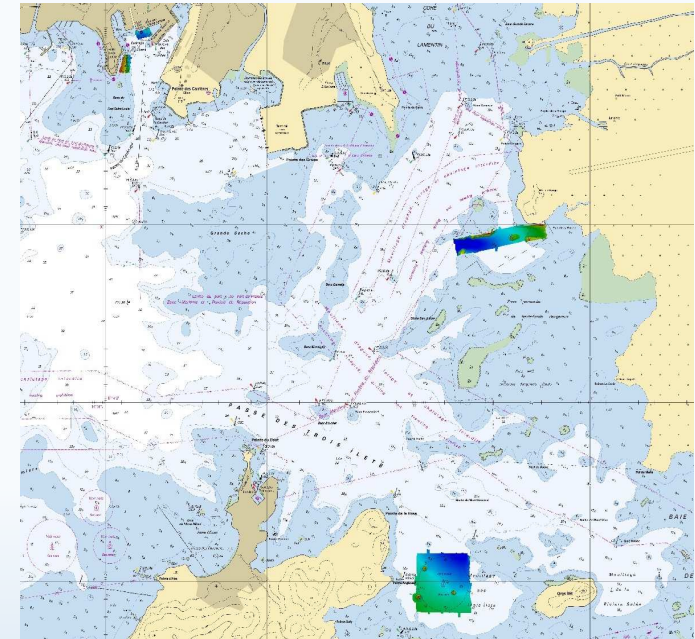


Top Achievements during the year (3 maximum)

- Shom's deployable hydrographic system (for rapid environmental assessment) upgraded with a very shallow multibeam sounder (Norbit iWBMSH)
- Survey conducted by Shom (March 2021) in Fort-de-France Harbour (Martinique) with upgraded deployable hydrographic system



MBES Norbit iWBMSH integrated to Shom's deployable hydrographic system



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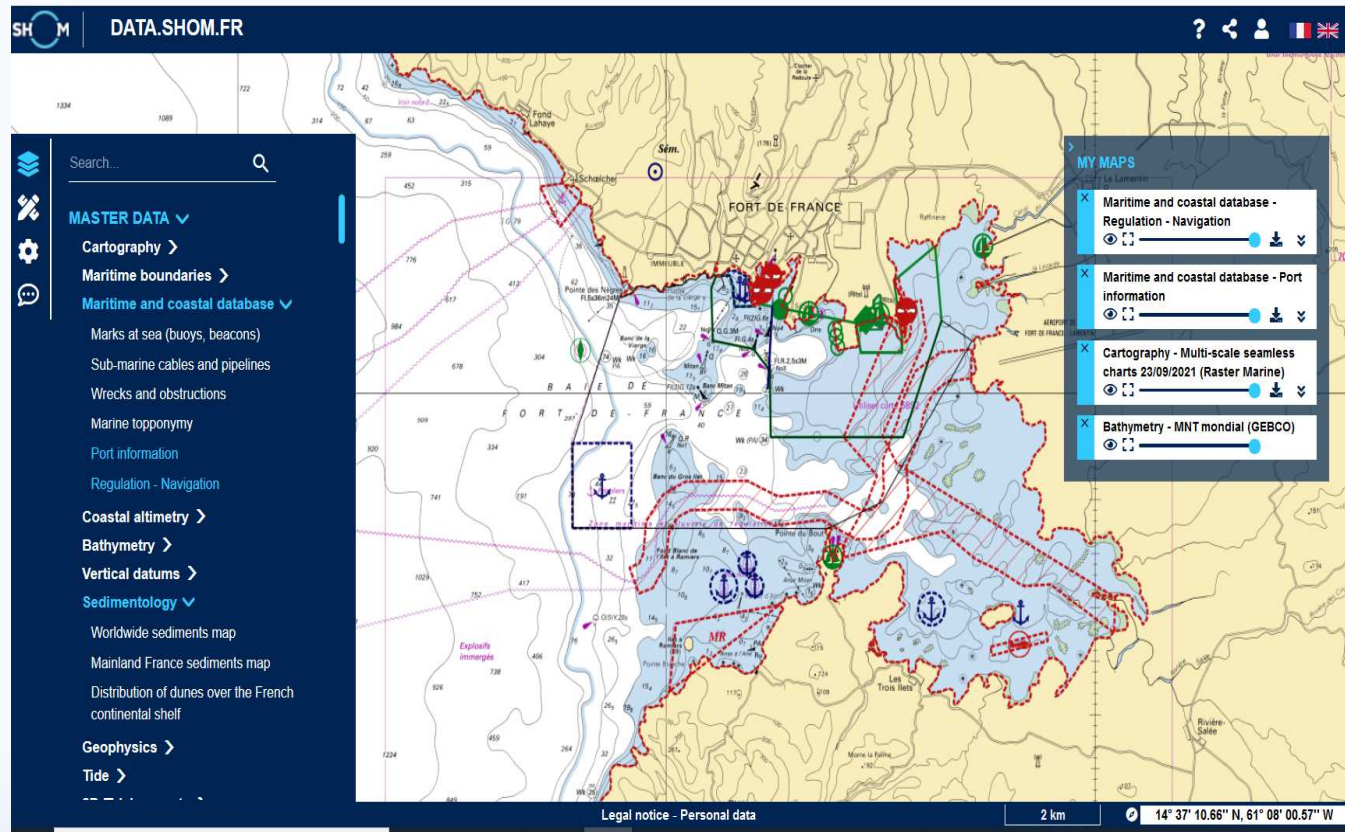


Top Achievements during the year (3 maximum)

- **MSDI : data.shom.fr portal**

- > **latest evolutions**

- Wrecks and obstructions (edition)
- Port information (new layer)
- Regulation – Navigation (new layer)
- Worldwide sediments map (edition)
- New tools and services
- New ergonomics
- Redesigned drawing tool



New layers : Port Information & Regulation



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Top Achievements during the year (3 maximum)

- **Future hydro-oceanographic capacities**

- > **latest experiments**

- September 2020 – 2 USV DriX (iXblue)
- January 2021 – AUV Gavia (Teledyne)
- May 2021 – USV Inspector (ECA)
- June 2021 – AUV A18D (ECA)
- August 2021 – 2 gliders Sea Explorer (Alseamar)
- October 2021 – AUV HUGIN Superior (Kongsberg Maritimes)



Experiment of USV DriX deployed from BHO Beautemps-Beaupré

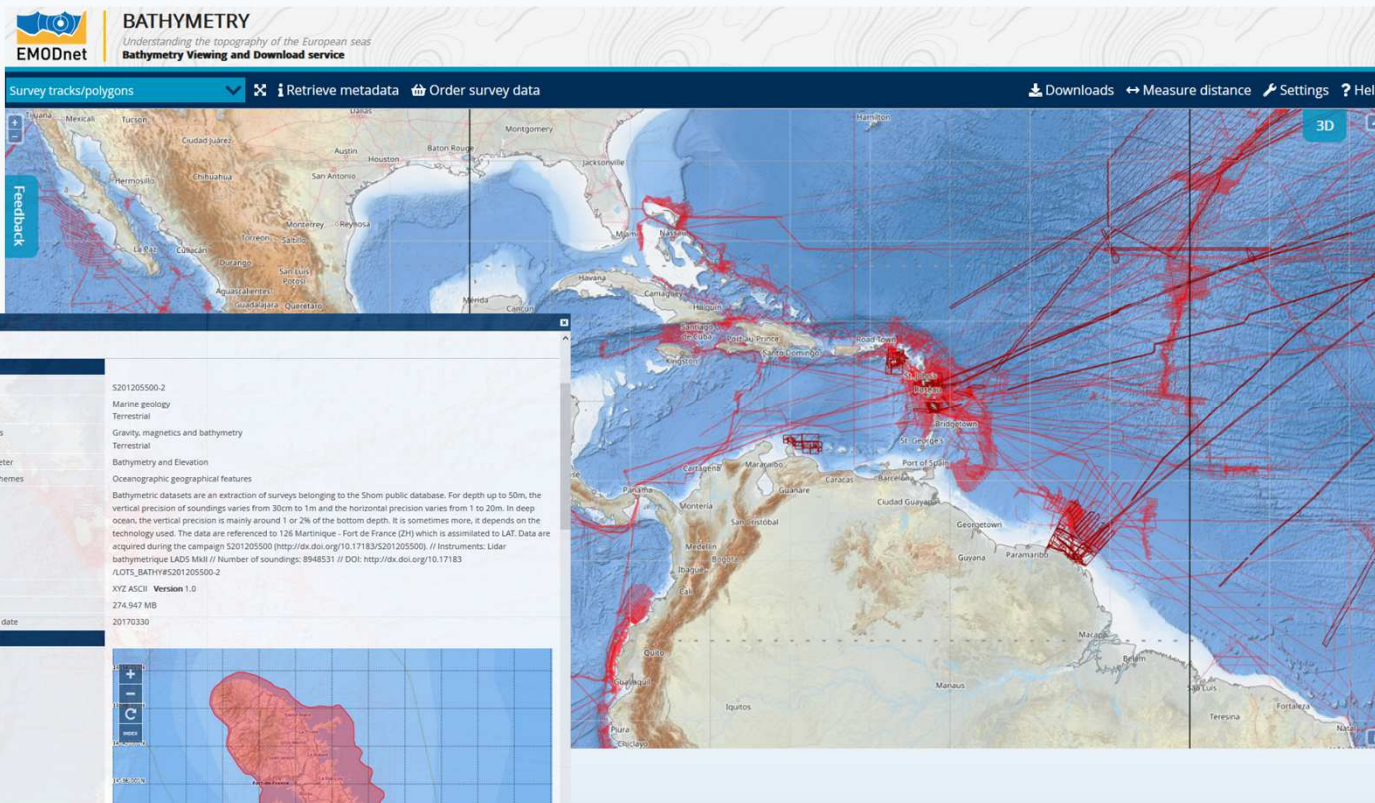


Experiment of AUV HUGIN deployed from BHO Beautemps-Beaupré



Top Challenges and/or Obstructions (3 maximum)

• EMODnet Bathymetry (1/2)



Coverage & Metadata

- Each polygon/poly-line shows the bathymetric coverage/location
- Associated Metadata (INSPIRE compatible, ISO 19115- based upon an unified and agreed thesaurus – BODC held)
- Source data held by the data provider, who decide how to provide its dataset to the final user



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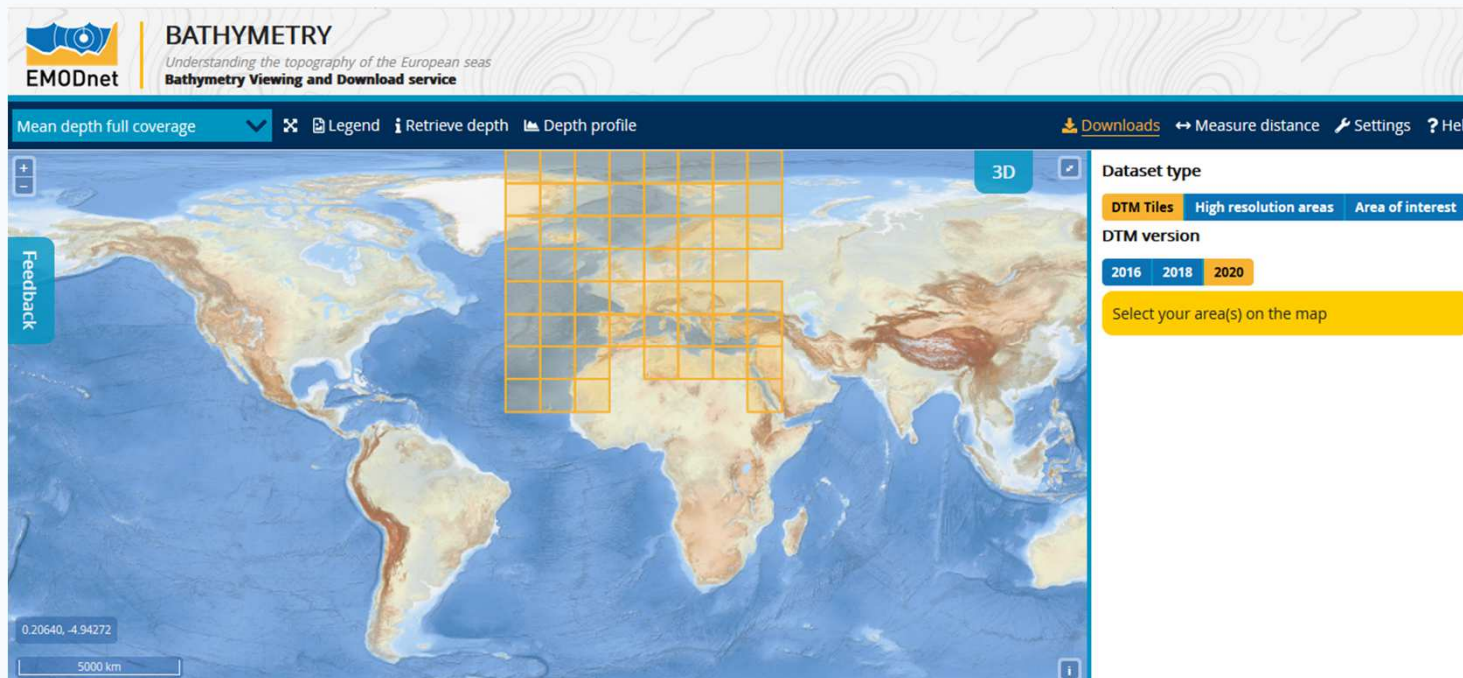


Top Challenges and/or Obstructions (3 maximum)

• EMODnet Bathymetry (2/2)

DTM

- Currently available : Europe mainland
- Resolution : 1/16 arc-minute (~100m)
- Built from data from partners (HO, Oceanographic centers, private partners)
- DOI, free of charge, free to use
- Available at MSL and LAT



2022 : generation of bathymetric DTMs of waters under the jurisdiction of EU countries in the MACHC Region (Martinique, Guadeloupe, Curaçao, Aruba, Sint Marteen & Carribean Netherlands) with similar characteristics



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Top Challenges and/or Obstructions (3 maximum)

- **UKHO – Shom S-100 ECDIS collaboration (1/2)**
 - > **Project as a risk assessment on the Dual Fuel mode of ECDIS**

High level goals

- Develop S-101 understanding, from data production to ECDIS display
- Safety case to support IMO approval of the S-100 ECDIS systems
- Develop RENC capability and support industry on S-100 ECDIS
- Build a testing framework for similar S-100 ECDIS testbed project



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Top Challenges and/or Obstructions (3 maximum)

• UKHO – Shom S-100 ECDIS collaboration (2/2)

> A long-term & 3-phase project

Phase 1 : Data production

- S-57 to S-101 conversion
- ENC updating
- ENC scheming (paper chart vs gridding)

Phase 2 : Data distribution

- HO to RENC data delivery
- RENC validation
- Cybersecurity : encryption, signatures, licensing, compression

Phase 3 : Data display

- Sea trials



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Top Plans that affect the region (3 maximum)

(Charts, surveys, training, other)

- **Charts**

- 2021/2022 : 6 new editions planned (FR6738, FR6892, FR7337, FR7381, FR7471 & FR7482)

- **Surveys**

- French Antilles > Opportunity works around Martinique & Guadeloupe in 2022-2023
Next survey campaign in 2024
- French Guyana > Next survey campaign in 2024
- Clipperton Islands > No systematic planned surveys, only opportunity works

- **Tide gauge network**

- renewal of the datalogger and some real time transmission elements in 2022 and 2023



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