

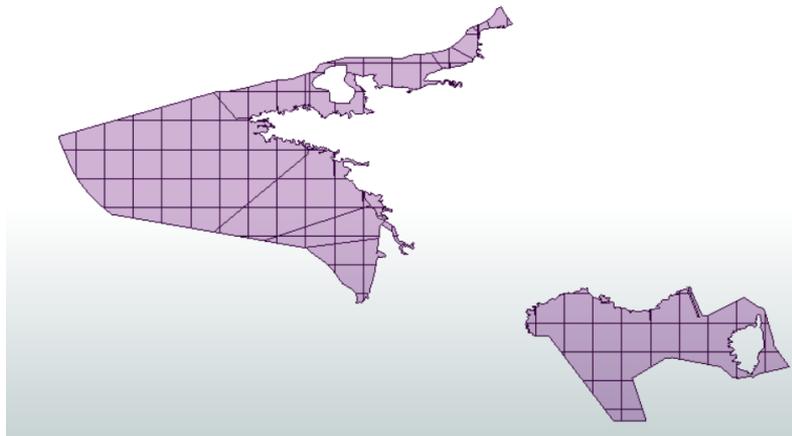
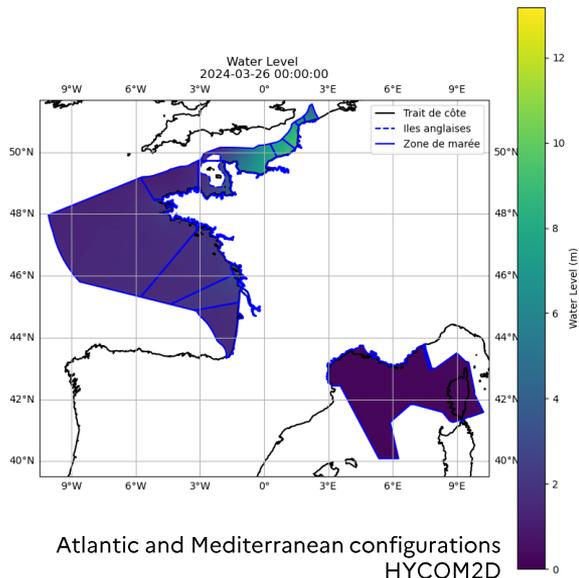
# PRODUCTION OF S-104 AND S-111 AT SHOM

# Water level (S-104)

S-104 Water Level	
Spatial resolution	Time resolution (astron.prediction / forecast)
~0.01°	15 min / 60 min

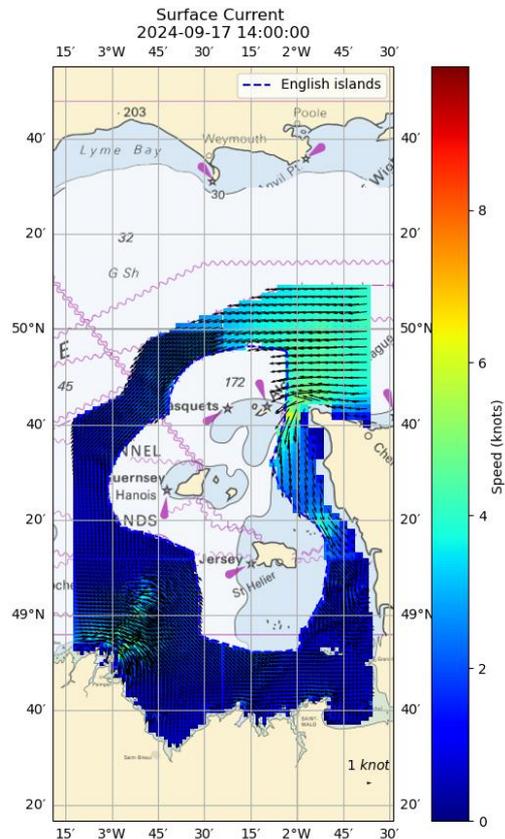
Today Shom produces 2 types of datasets :

- Astronomical tidal predictions (tide model)
  - Forecasts (astro. prediction + HYCOM2D surge forecasts)
- ➔ Need to work on PS S-104, define the product, the dissemination process, ...



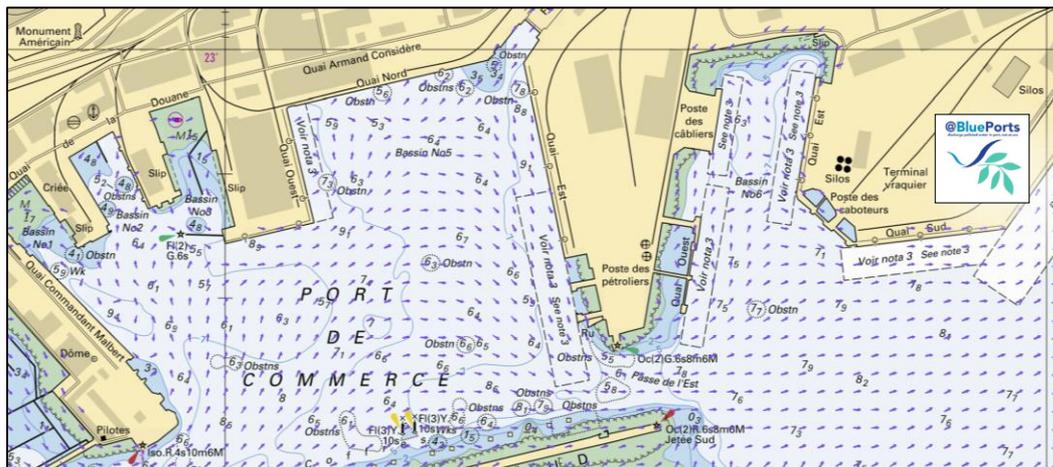
Cells 0.8x0.8° : UB3

# Surface currents (S-111)



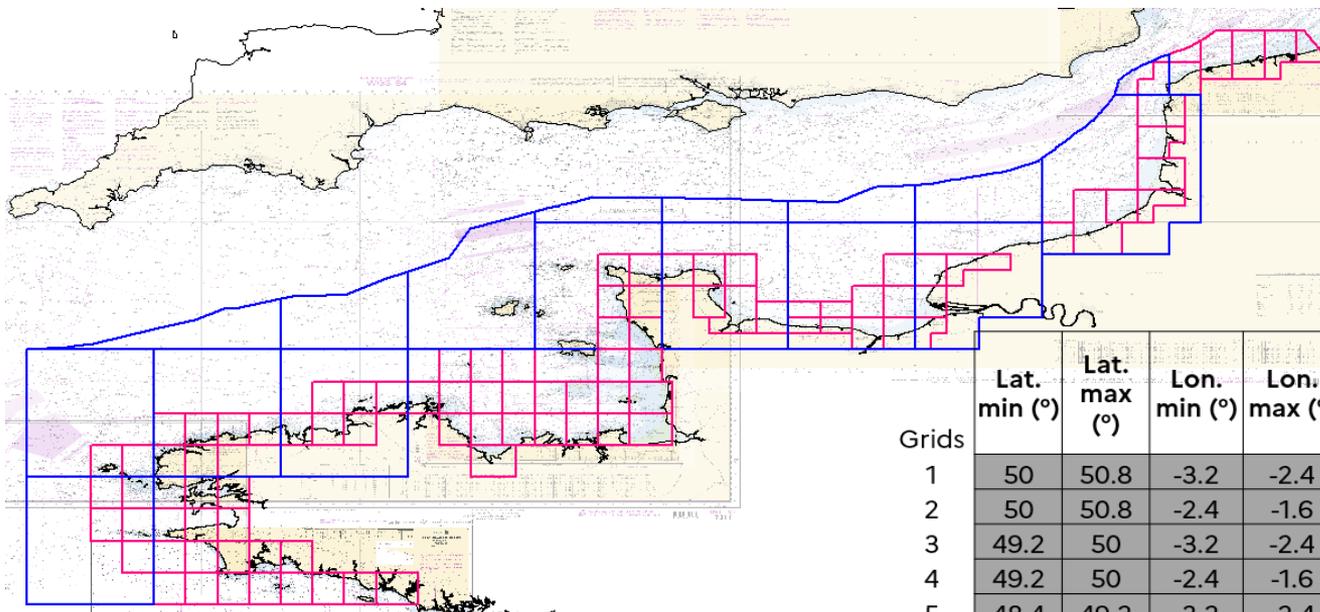
Shom produces **astronomical predictions and forecasts** using several models with different spatial and temporal resolutions.

- ➔ Today : Atlas, forecast on line on [data.shom.fr](https://data.shom.fr)
- ➔ Need to work on PS S-111, define the product, the dissemination process, ...



<https://data.shom.fr>

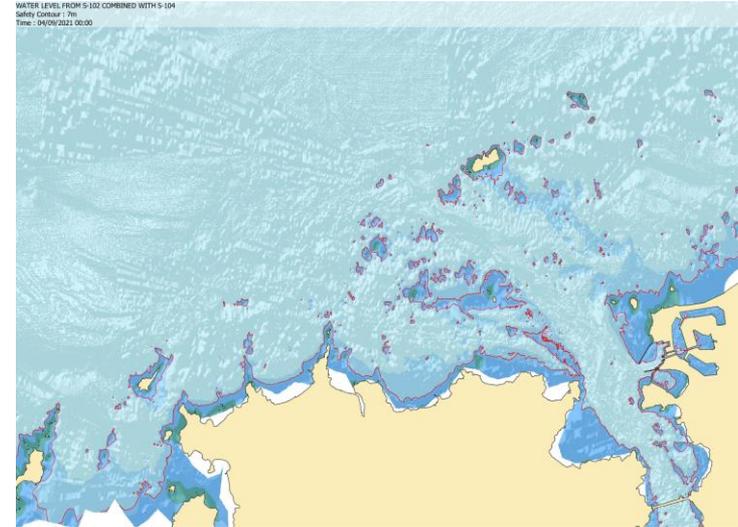
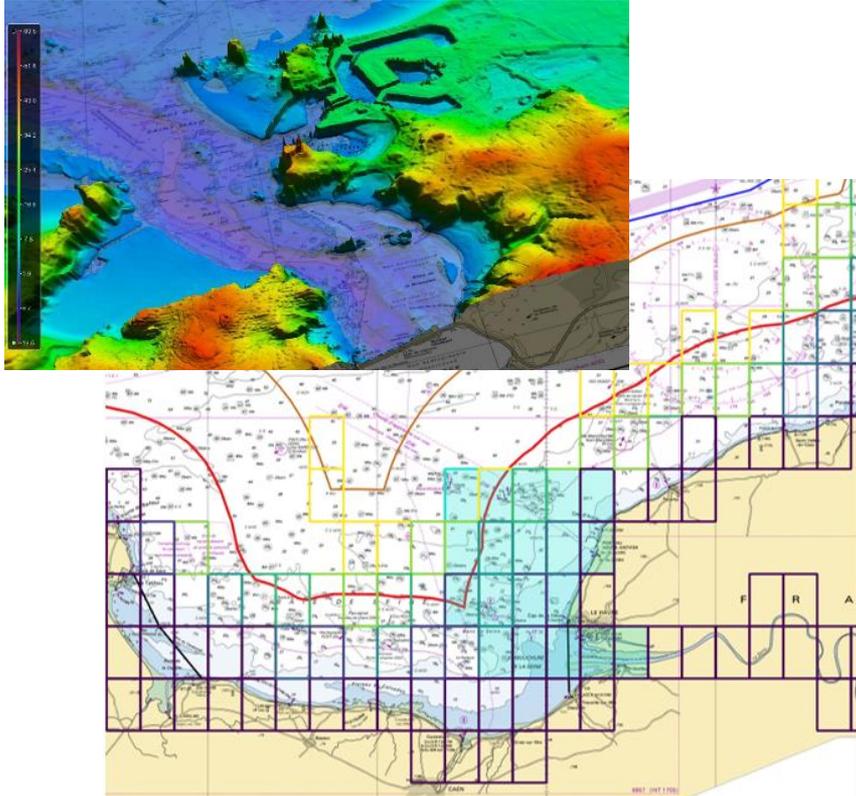
# Surface currents (S-111)



Grids	Lat. min (°)	Lat. max (°)	Lon. min (°)	Lon. max (°)	S-111 Surface Currents		Period
					Spatial resolution	Time resolution	
1	50	50.8	-3.2	-2.4	2 km	15 min	1 week
2	50	50.8	-2.4	-1.6	2 km	15 min	
3	49.2	50	-3.2	-2.4	0.5 km	60 min	
4	49.2	50	-2.4	-1.6	2 km	15 min	
5	48.4	49.2	-3.2	-2.4	0.5 km	60 min	
6	48.4	49.2	-2.4	-1.6	0.5km	60 min	

Division of S-111 cells under discussion (UB3, UB4)  
 → size and resolution depend on the netcdf atlas

# Bathymetric surface (S-102)



High-resolution dynamic safety contours  
S-102 & S-104 interoperability (S-98)  
and Under Keel Clearance (S-129)

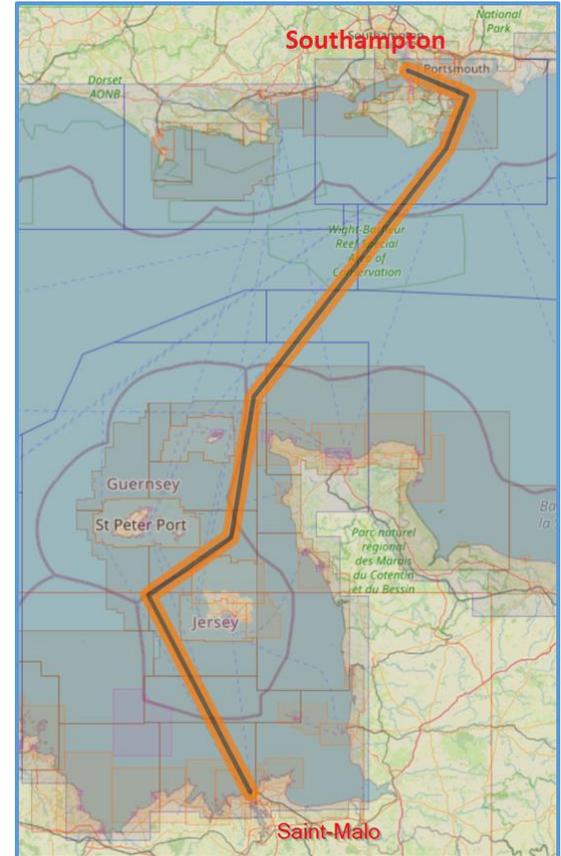
# Ongoing projects

## S-100 across the Channel

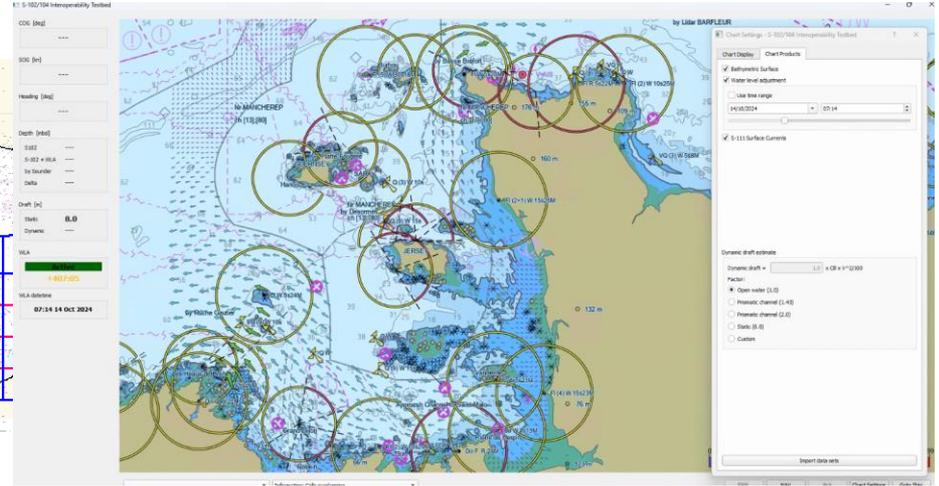
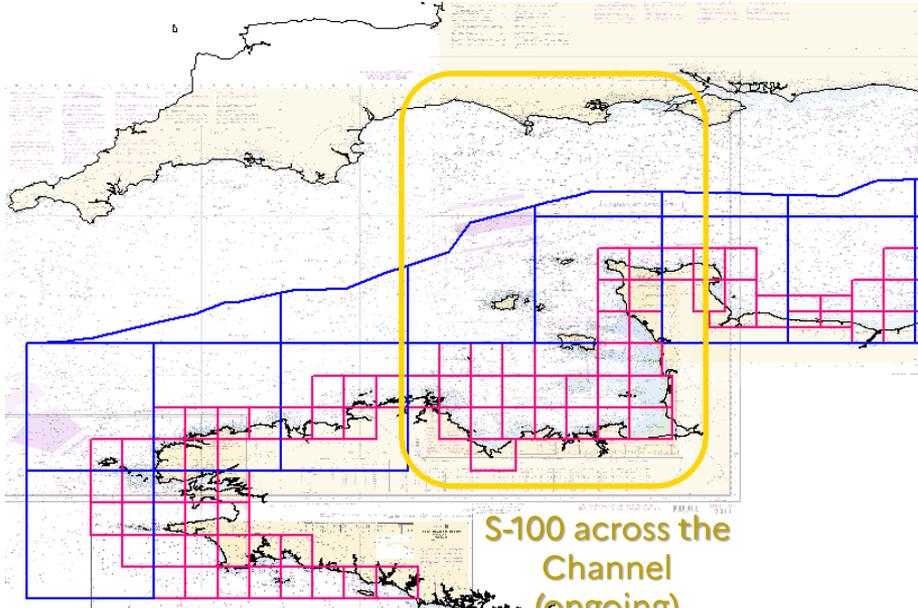
- Data production :
  - S-101 ENC, S-102 HD Bathymetric surface, S-104 Water level, S-111 Surface currents, S-124 Navigational warnings
- Distribution by RENCs, respecting cybersecurity standards
- Sea trials involving ECDIS manufacturers
- Partnership :



UK Hydrographic  
Office



# Ongoing projects

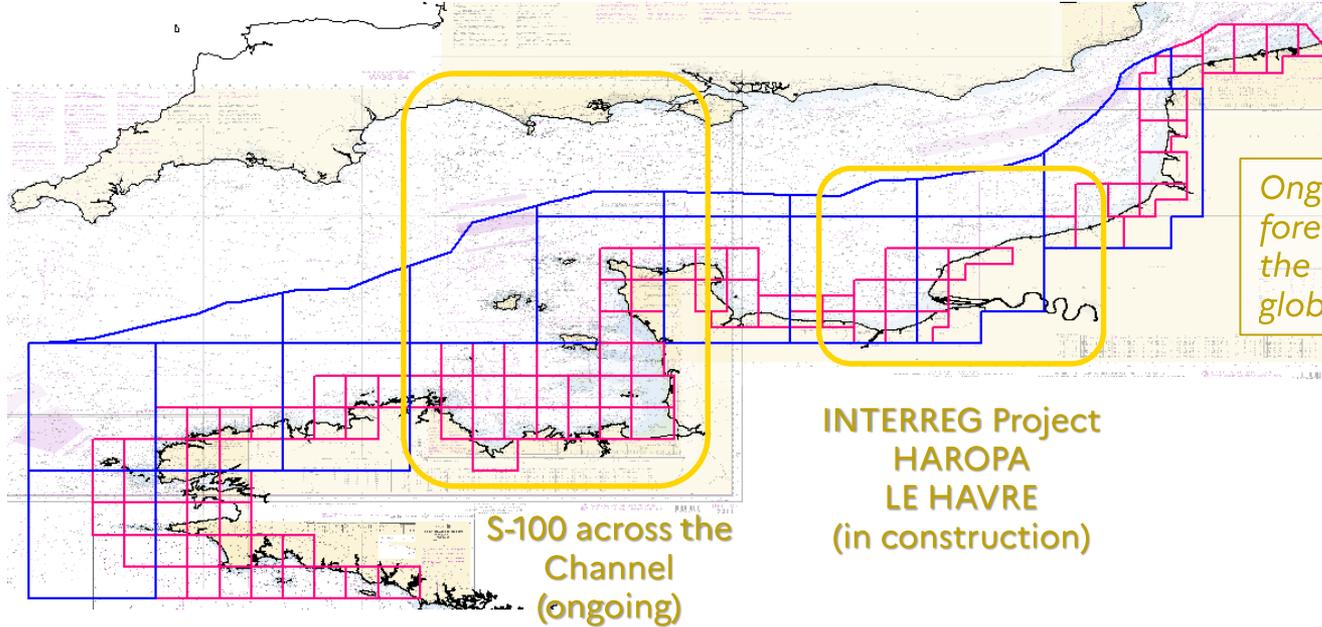


ECDIS read tests of S100 files produced by the Shom

→ Success

Next test planned with Condor Ferries, 7cs, UKHO, Shom to simulate fictitious Portsmouth-St Malo navigation scenarios (beginning of 2025)

# Ongoing projects



S-100 across the  
Channel  
(ongoing)

INTERREG Project  
HAROPA  
LE HAVRE  
(in construction)

*Ongoing discussions on the ability to forecast currents (tide + weather) in the study area around Le Havre (and globally)*

**MERCI !**

