



Old data & Chart Production

Inserimento rilievi idrografici nel Database

Metadata



IHO European Network

Plenary Session

27th Feb, French RP, Brussels



HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



- **HOs have;**

- 300 years old data or more
- Charts, Tide gauje,

These are historical documents to save **AND** precious data for the reconstitution of :

- ❖ Evolution of the coastal areas
- ❖ Modelling of climate change

They can work by State AND by Maritime Basins

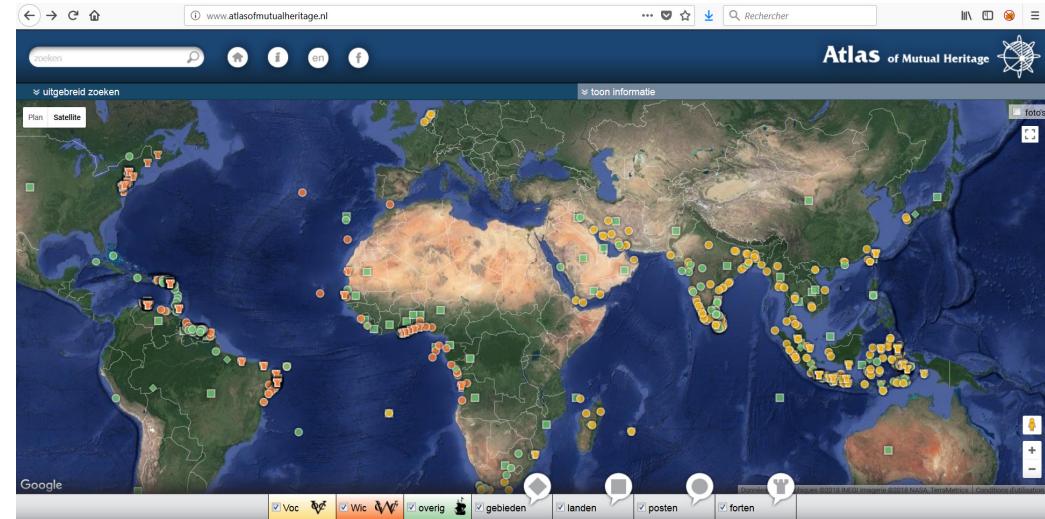
HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



NETHERLAND

The screenshot shows a web browser window with the URL www.atlasofmutualheritage.nl. The main content is a historical map titled "Gezicht op de stad Madeira" by Rach, Johannes, dated ca. 1780. The map depicts a coastal town with numerous buildings and ships in the harbor. Below the map is a detailed description in Dutch: "Gezicht op de stad Madeira. Op de voorgrond vele schepen, linksvoor een Oost-Indiëvaarder die de Nederlandse vlag voert." A table provides metadata: vervaardiger (Rach, Johannes), periode (ca. 1780), materiaal (papier), and soort (tekening).



1. Only tide gauge records and nautical charts together provide a full understanding of the impact of long term water level change. Because of the very different nature of these data sets, they should be organized in different subprojects.
2. Historical tide gauge data are currently dealt with by GLOSS (IHO CL04/2012), with a liaison to the IHO TWCWG. A new European project could stimulate the GLOSS work enormously. In NL, tide gauge data for the past few decades is available through http://live.waterbase.nl/waterbase_wns.cfm?taal=en.

3

12.03.18

HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



BELGIUM

① www.vliz.be/hisgiskust/en/image-library?album=4900&pic=111613 ... 🌐 ⚡ ☆ ⏪ 🔍



Hor



Descrittione ...di tutti i Paesi Bassi...
Oostende

Description Historical maps from the collection of Cultuurbibliotheek (Sint-Lodewijkscollege, Brugge), which were scan by VLIZ in the framework of the project 'Historical maps of the coastal zone' (Funding: Province of West Flanders).
Author Guicciardini. Lodovico (1581)

① www.vliz.be/hisgiskust/en/image-library ... 🌐 ⚡ ☆ 🔍 Rechercher



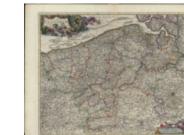
Home About Tut



1. Historical maps 16th century (6)



2. Historical maps 17th century (71)



3. Historical maps 18th century (20)



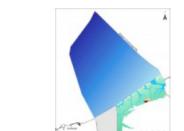
4. Historical maps 19th century (89)



5. Historical maps 20th century (54)



6. Geometric accuracy maps (129)



7. Paleogeographic maps (5)

ⓘ Click on an image to select an album

4

12.03.18

HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS

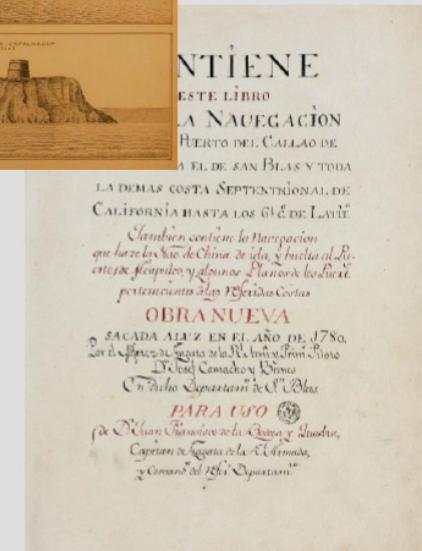
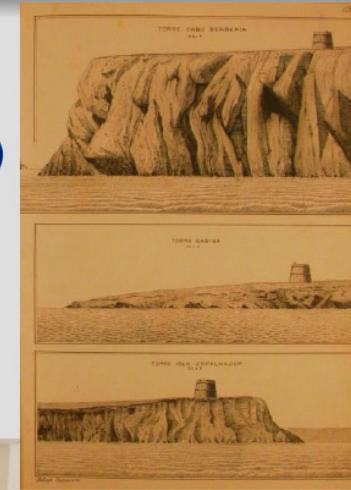


SPAIN

IHM HISTORICAL ARCHIVES



- 991 Copper plates (1740-1950)
- 5400 Nautical charts (1740-1970)
- 820 Surveys and documentation (1783-1950)
- 104 Annual memories (1944-2009)
- 455 Photographs (1944-1990)
- 75 Coastal views (1920-1960)
- 750 Historical documents (XIX-XX cent.)





IHM HISTORICAL ARCHIVES

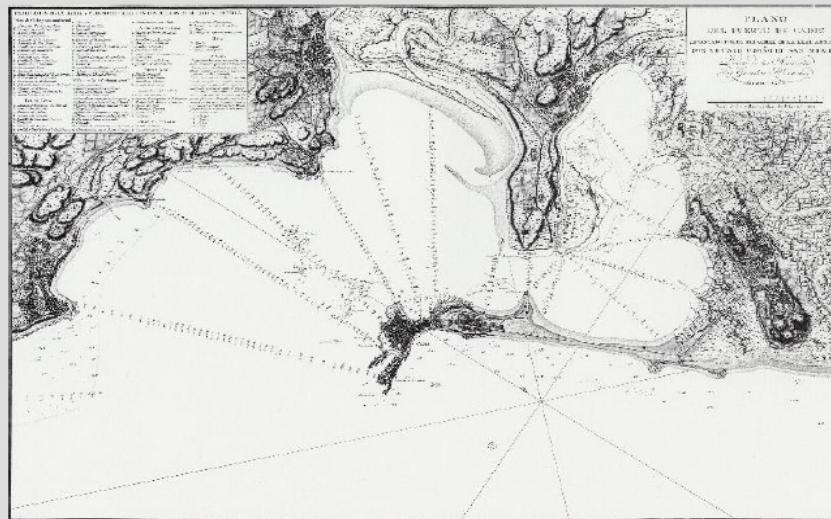


- Current works

Digitizing historical nautical charts and surveys, georeference and store them in a Database.

- Future Plans

Digitize 200 tide observation rolls (XIX cent.).



Italian Hydrographic Institute (IIM) Archives Consistency



Over **18 000** paper documents including:

10 000 maps in rolls (geodesy, bathymetry and topography since 1872)

8 000 nautical charts since 1873

30 coastal views

150 packages containing documentation
survey

500 folders containing documents
nautical charts

over 1000 Tide observation rolls from 1884 in Genova



Porto Maurizio (Imperia) - 1895



Nautical chart 122 Da Oneglia
(Imperia) a S. Remo -1886



HISTORICAL DATA- DATA RESCUE

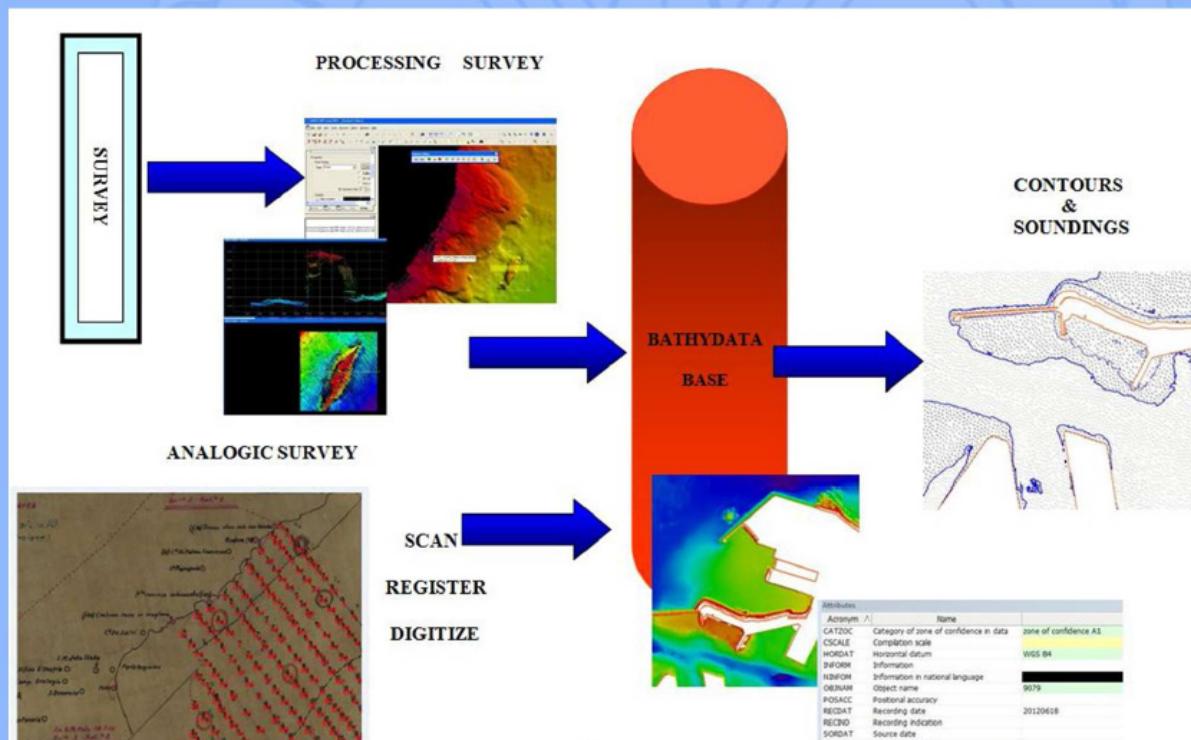
OUR MEMORY FOR THE FUTURE GENERATIONS



Future Plans



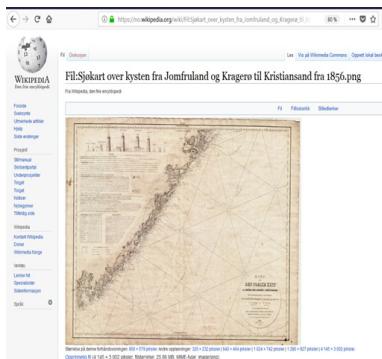
to digitize all the 18.000 documents (old charts, survey sheets and survey reports) to store them in a **dedicated** and **shared** Web-Database.





Historical Nautical Charts Norway

- The Norwegian Mapping Authority has released its central national datasets as open data: <https://www.kartverket.no/en/data/Open-and-Free-geospatial-data-from-Norway/>
- 80% of the historically valuable nautical charts (265 charts) archived by Norwegian Hydrographic Service have been made available through Wikipedia by Norwegian Hydrographic Service:
https://no.wikipedia.org/wiki/Liste_over_historiske_dokumenter_hos_Statens_kartverks_sj%C3%B8division
- Time series of tidal measurements of 23 places along the Norwegian coast, dating back to early 20th century



Tide calculating machine in use from 1947 to 1977, donated to and still operational at Stavanger Maritime Museum



HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



Historical Charts in Denmark

Historiske kort på nettet
Geodatastyrelsen
Styrelsen for Dataforsyning og Effektivisering

Matrikelkort Sogn- og herredskort Økonomske kort Topografiske kort - landsdekkende Topografiske kort - regionale / andre Sakort Printroller

Seg via Ejernav > Ejernav Kort / stednavn >

Resultat af søgning Ingen søgning er udført.

GRONLAND
MARE CRONIUM vel GLACIALE
OCEANUS DEUCALLODO NIUS



Navigational charts for Danish Waters

Historiske kort på nettet
Geodatastyrelsen
Styrelsen for Dataforsyning og Effektivisering

Matrikelkort Sogn- og herredskort Økonomske kort Topografiske kort - landsdekkende Topografiske kort - regionale / andre Sakort Printroller

Seg via Dansk- eller oversæisk farvand Søgefelt: Søgefelt > Dansk farvand Hjælp Danmarks ?

Resultat af søgning Segeresultat for kortsøgning via Service_D1.SimpleSearchMDFromRegion Antal tilgængelige sejlkort (ca. 1750-1900) i søgeresultat: 21

Ejdøse sejlkort (ca. 1750-1900) (21)

Vn. Navn	Ophav	Ar	Målestok	Bemærkninger
Vn. Danmark og Østersøen	Jens Sørensen	1719		
Vn. Danmark og Østersøen	Jens Sørensen			
Vn. Danmark	Jens Sørensen			
Vn. De danske øer	Jens Sørensen	1715		
Vn. Øerne	Jens Sørensen			
Vn. Fyn	Jens Sørensen			
Vn. Kattegat, Store Bælt, Øresund, Danskøen	Lorentz Louis	1749		
Vn. Kattegat, Sundet og Bæltene samt Østersøen	Jens Sørensen?			
Vn. Sundet og bæltene	O.H. Førde	1745		
Vn. Sundet og bæltene	L.H. Førde	1757		
Vn. Småbæltshavet, Østersøen	L.H. Førde	1787		
Vn. Kattegat og Østersøen vestlige del	Christian Carl Louis	1773		
Vn. Kattegat og Østersøen vestlige del	Christian Carl Louis	1773		
Vn. Øresund og bæltene	Christian Carl Louis	1777		
Vn. Øresund og bæltene		1807		
Vn. Øerne og øen Amrum		1808		

Navigational charts for Waters outside Denmark

Historiske kort på nettet
Geodatastyrelsen
Styrelsen for Dataforsyning og Effektivisering

Matrikelkort Sogn- og herredskort Økonomske kort Topografiske kort - landsdekkende Topografiske kort - regionale / andre Sakort Printroller

Seg via Dansk- eller oversæisk farvand Søgefelt: Søgefelt > Oversæisk landstid ?

Resultat af søgning Segeresultat for kortsøgning via Service_D1.SimpleSearchMDFromRegion Antal tilgængelige sejlkort (ca. 1750-1900) i søgeresultat: 72

Ejdøse sejlkort (ca. 1750-1900) (72)

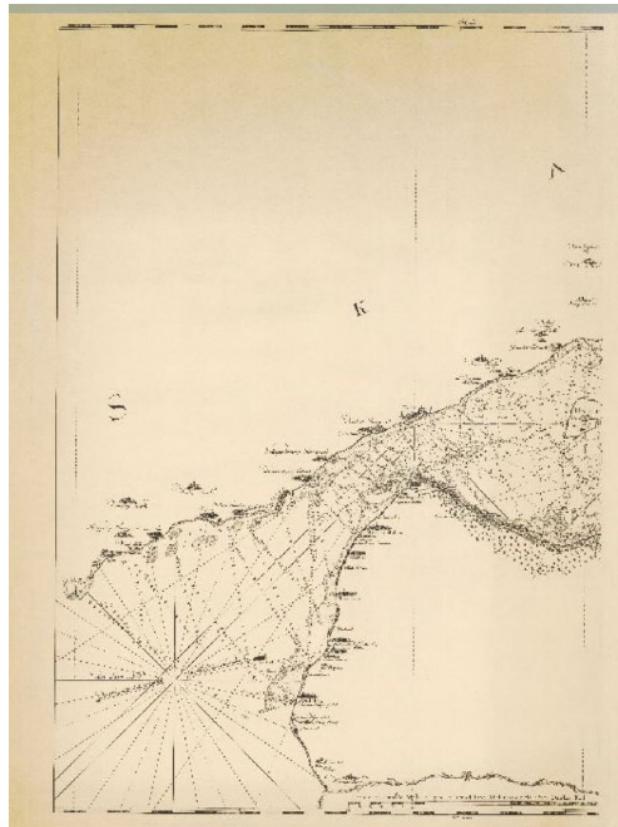
Vn. Navn	Ophav	Ar	Målestok	Bemærkninger
Vn. Grönland	A.B. Bættrup	1732		
Vn. Grönland 50°, 73° N	P. Egede	1733		
Vn. Grönlands vestkyst	O. Clausen	1784		
Vn. Grönlands vestkyst	O. Clausen	1784		
Vn. Grönlands vestkyst	O. Clausen	1784		
Vn. Disko Bagt	Freykjær			
Vn. Disko Bagt	P. Egede	1738		
Vn. Godthavn?				
Vn. Kølonien Republik?	I.B. Ducke			Landstiderne
Vn. Kølonien Republik	I.B. Ducke			Landstiderne
Vn. Kølonien Republik	A. Gammel	1731		
Vn. Kølonien Bait's Revier				
Vn. Kølonien Bait's Revier				

HISTORICAL DATA- DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS

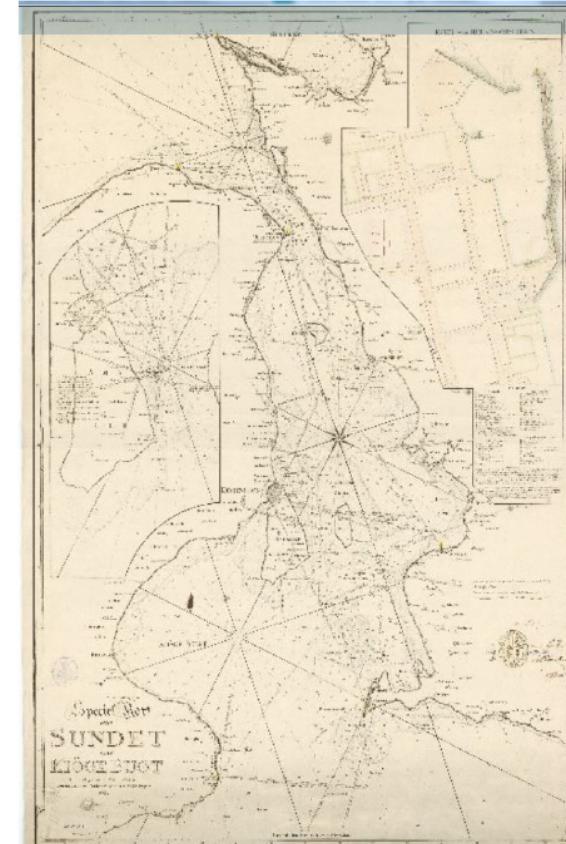


Fra Kronborg (Sound) til Stevns
1775



Danish Geodata
Agency

Fra Kronborg (Sound) til Stevns
1832

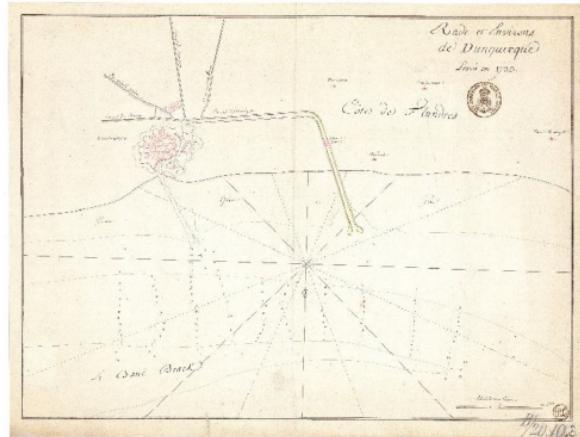


HISTORICAL DATA-DATA RESCUE

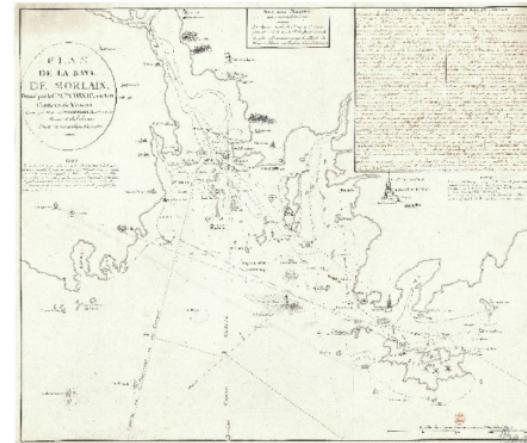
OUR MEMORY FOR THE FUTURE GENERATIONS



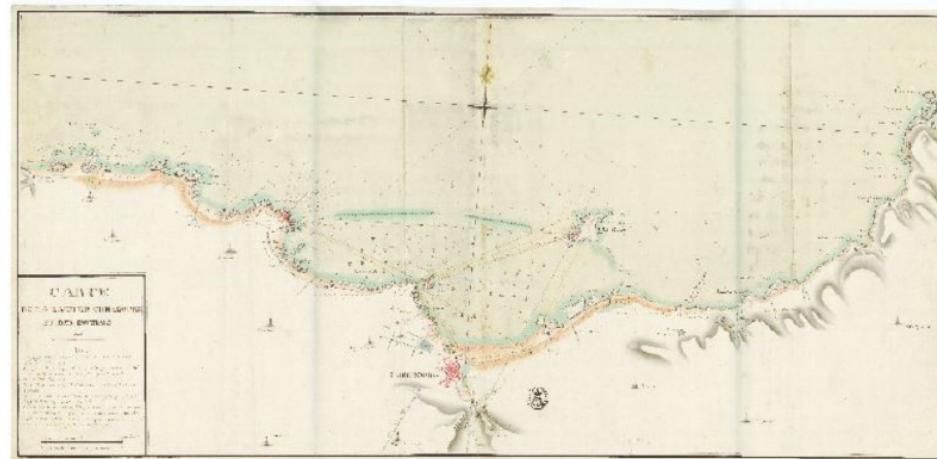
Dunquerque 1690



Morlaix C.C.Cornic 1794



Cherbourg 1784



Danish Geodata
Agency

HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



Mean sea level at Brest since three centuries

Climate change

Marine submersion

Sea level change

Shore line management

www.shom.fr

To contact us, please call + 33 (0) 2 56 312 312

For collecting information relative to your marine, coastal activities, please visit diffusion.shom.fr

For free access to physical marine environment data please visit data.shom.fr

Read all about our latest projects and program developments on:

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ARCHIPEL PROJECT

A digital gate into the SHOM cartographic heritage

Online SHOM archival records

1750 1870 1912 1965 2013

SHOM

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HISTORICAL DATA-DATA RESCUE

OUR MEMORY FOR THE FUTURE GENERATIONS



SHOM archives,
an impressive cartographic heritage

The SHOM archives departments contain more than 200 000 paper documents, some of the oldest ones dating from the early 1800s.

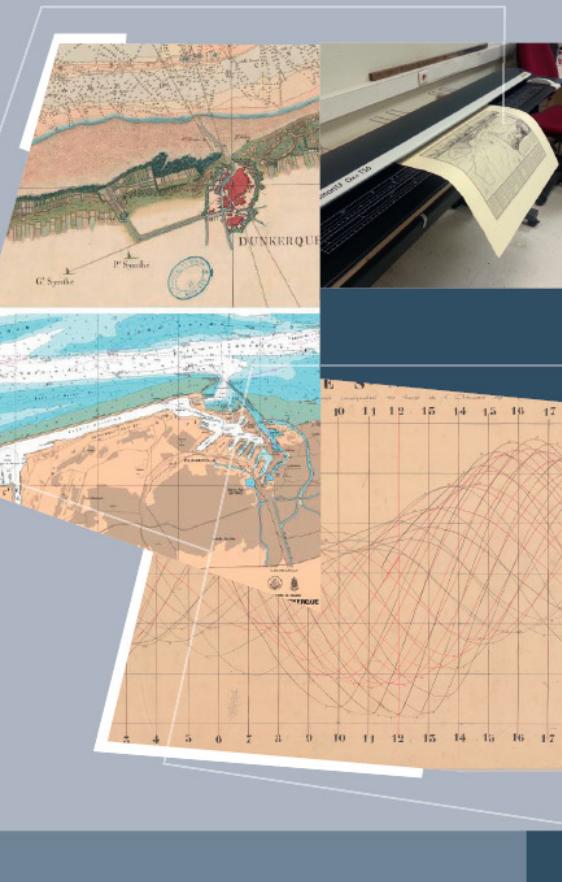
Due to their high technical standards these documents are crucial for a better understanding of the coastal changes over the past two centuries concerning: coast line, sea beds, mean sea level, tide gauge observations, marine submersion (observation of storm surges)...

About 200 000 paper documents including:

- 75 000 manuscript maps (bathymetry and coastal topography);
- 10 000 old nautical charts;
- 45 000 tide gauge charts / marigrams;
- 10 000 aerial photographs;
- 10 000 books;
- 50 000 pages of tidal observation registers.



The Archipel SHOM project got budget in the first call for tenders of the Projects of Investments for the Future (PIA-Fund "Helping Public Sector Digital Switch Over and Public Action Modernization"). Its purpose is to illustrate the cultural, scientific and economic potential of SHOM archives and to seek sponsored funding in order to continue their digitization and putting on line process.



SHOM commits to reviewing and describing the physical marine environment and to predicting its evolutionary trends. It is in charge of establishing the Reference Databases describing the seabeds depth, the sea level, the marine currents, the nature of the sea floors, the position of the marine wrecks...

Such SHOM collected data and expertise are currently used to realize the marine maps and nautical charts that are required for safety of navigation purpose as well as for numerous, other purposes: prevention of coastline submersion, management of human sea uses, marine environment protection, or maritime spatial planning...