Archives

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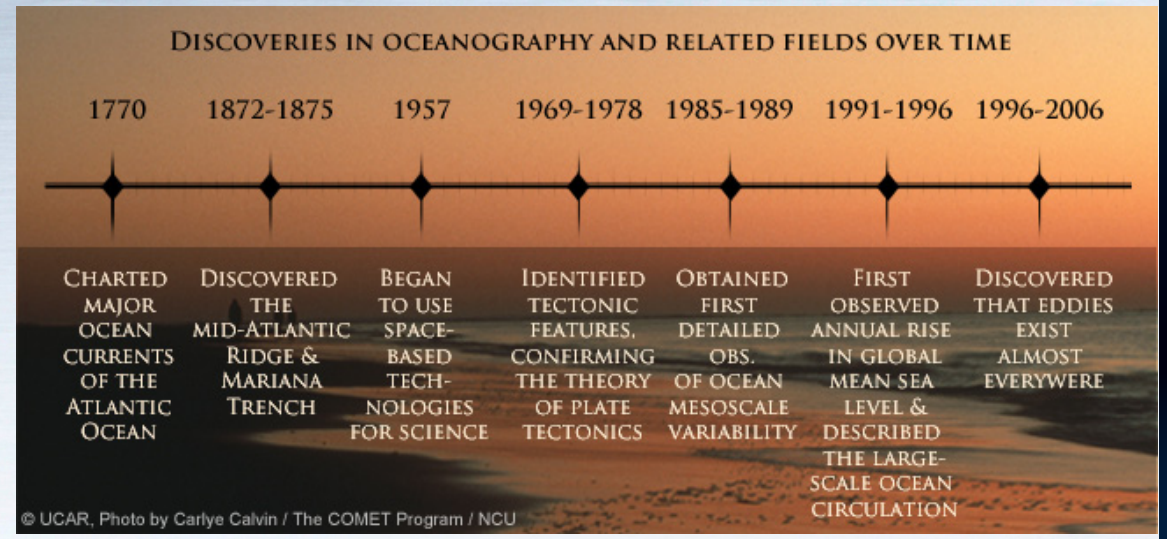
OCEanArchNetwork: Why is this important?



Source: https://www.eumetsat.int/jason/print.htm

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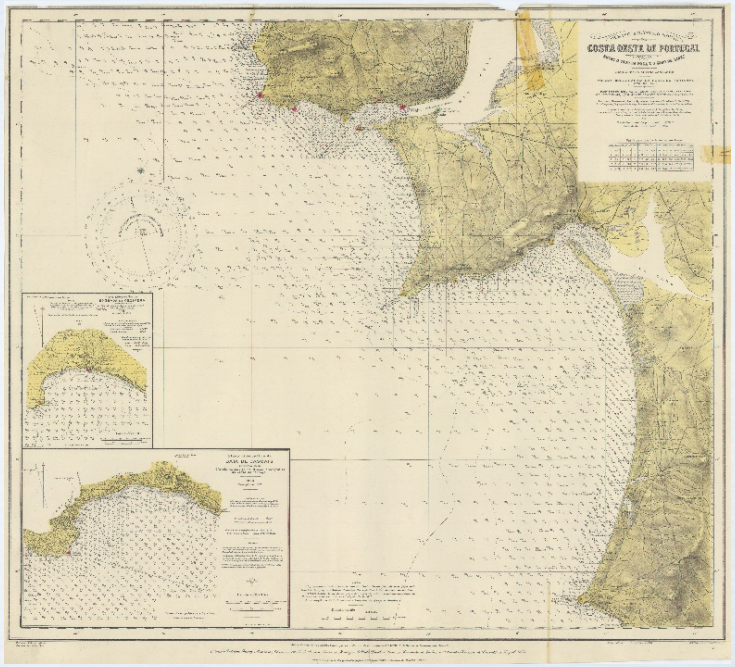
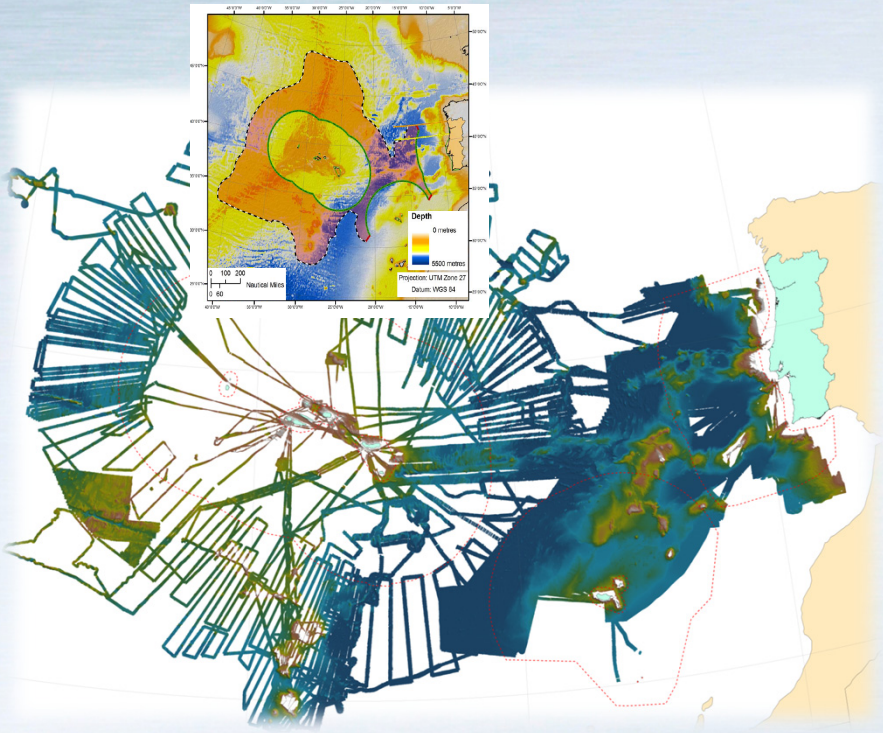
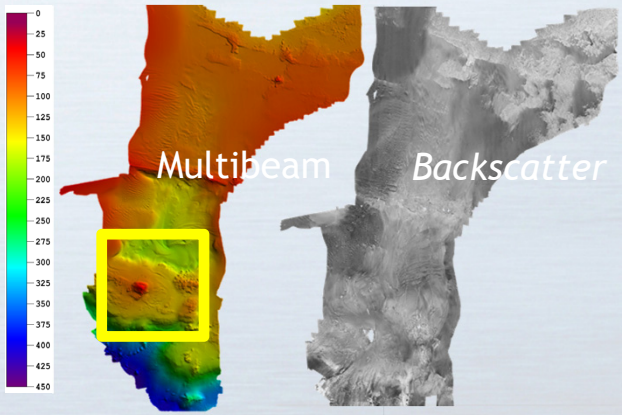
OCEanArchNetwork: Why is this important?

Today we live with high density digital marine data but one big question prevails:

Is or Is not the old data an important piece for a better Knowledge of the Ocean and Coastal Dynamics?







OCEanArchNetwork: Archives

Archives:

More than 170.000 paper documents including:

OCEanArchNetwork: Some numbers?

Marine Geology from 1978 to 2000:

- Sysmic Analogic Registers – 40 000 Km of surveys;
- Side Scan Sonar Analogic Registers – 6 000 Km of surveys;

Hidrography:

- 4 400 Historic Nautical charts (National);
- 4 000 Historic Nautical charts (International);
- 6 812 Hydrographic surveys sheets;
- 2 135 Scientific reports;
- 50 old aerial analogic photos;
- 500 Nauthical Chart creation reports;
- Several Foreign Seas Hydrographic campaign reports;

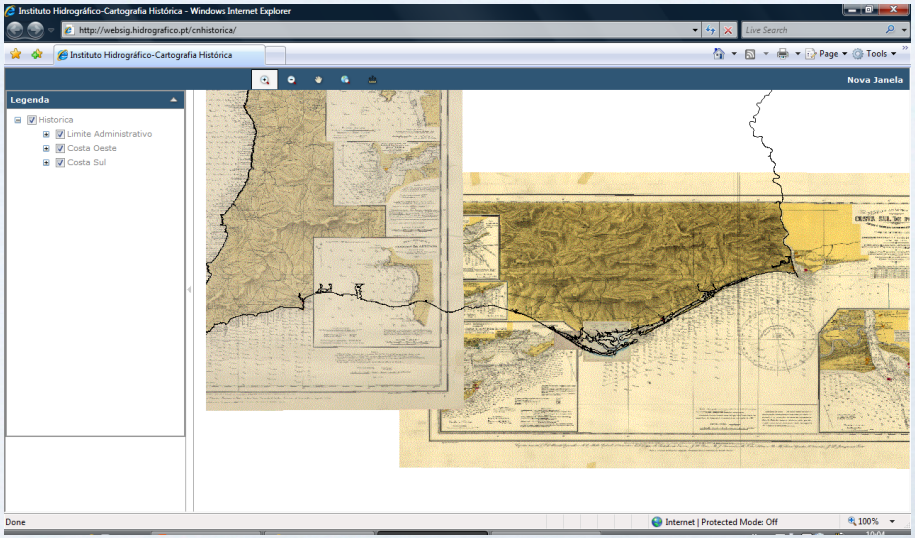
Oceanography:

- 3 600 Tide Diagrams (after 70s);
- 5 200 Tide Diagrams from foreign countries;
- Several Scientific Reports;
- Several Analogic Registers of Sea State Data;
- Several Analogic Registers of Currents (before 1970)

OCEanArchNetwork: Current Work

Nautical Charts:

- The digitalization and georreferencing process has started in 2009 and since then it has been a non-stop process. However due to the lack of funding the process is slow; This process need some automatization and digital image algorithm development for automatic features extraction.



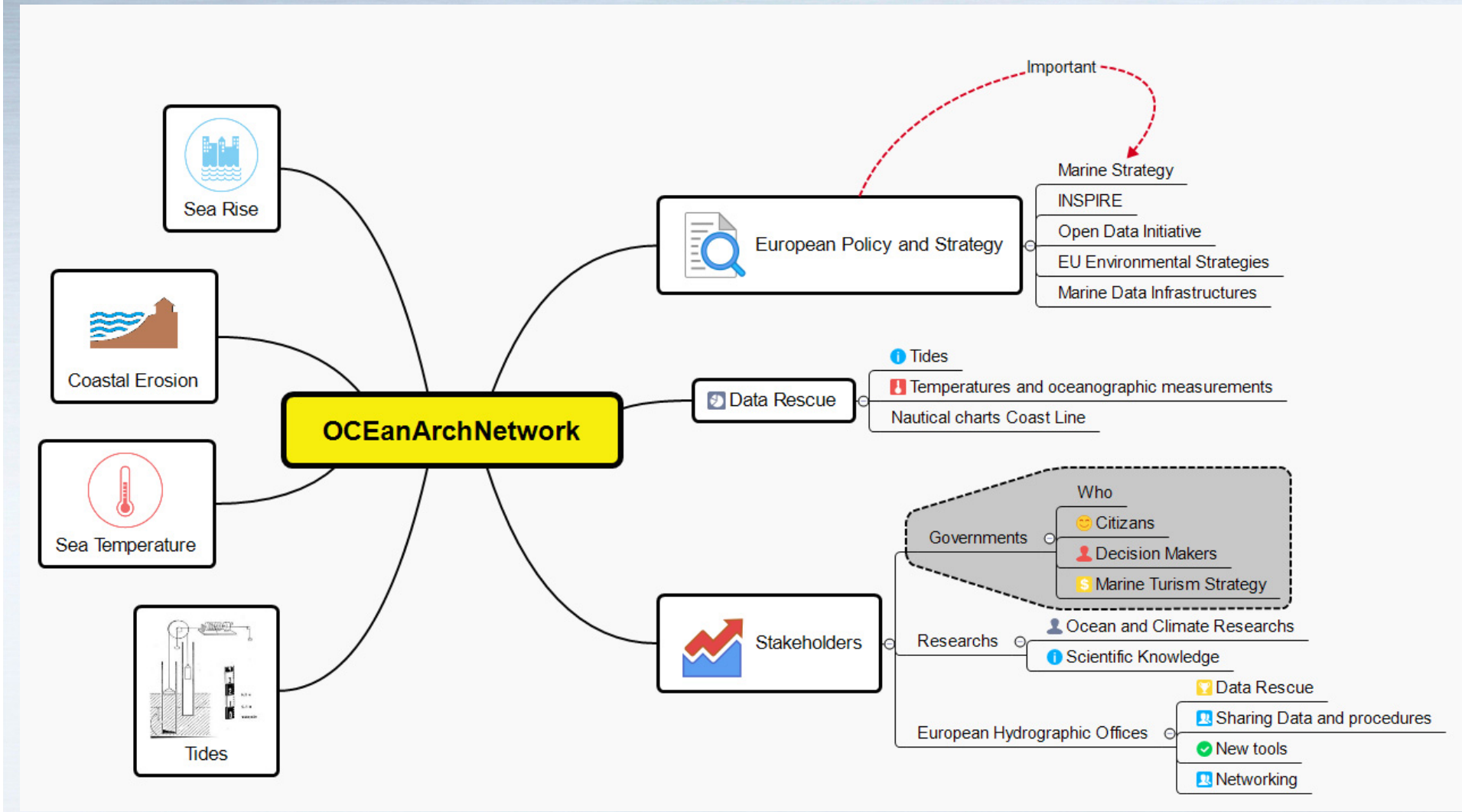
Marine Geology Registers:

- Hydrographic office started the data rescue using a digital camera for images aquisition and manual process to mosaic creation. the methodology is ineficient and need to improve image distortions correction process;

Tide Diagrams:

- The manual extraction of time series have been done but without some automatization this is a time consuming process of human resources and a very slow procedure,

OCEanArchNetwork: How can we improve?



OCEanArchNetwork: The Project

OCEanArchNetwork – Ocean Archives Network

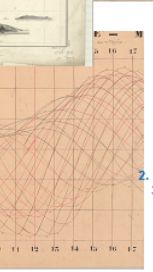
and Catalogation of Resources

dentification and catalogation of all resources (Charts, graphic diagrams, tide diagrams, oceanographic analogic erial photografs, etc.) in a common database (WebSite and nt – Ex.: DSPACE Open Source Repository URL: http:// www.dspace.org/)

ary among the different countries and among the category earchers, Hydrographic offices and stakeholders

ces Digitazing and Catalogation

cal Charts and Old Survey Diagrams
Processing tasks:
nd temporal referencing the images
(INSPIRE Compilant Metadata Editor)
tore High Resolution Raster Images



Scanner

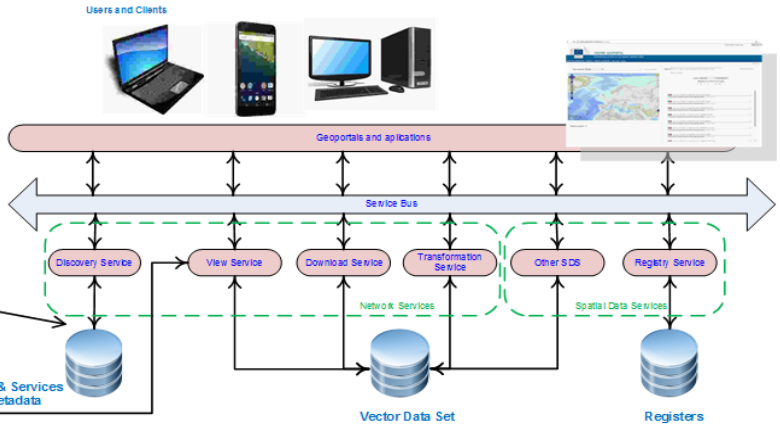
Low Resolution
Raster Data Set

High Resolution
Digitizing Georreferenced Raster
Products
(This data is keep in institution
repositories without
disseminaton)

WP 2.2 Historic Tide Gauge Diagrams
Processing tasks:
1. Geografic and temporal referencing the images
2. Metadata creation (INSPIRE Compilant Metadata Editor)
3. Organize and Store High Resolution Raster Images

n and Products for research and decision support

Spatial Data Infrastructure Development – Based on INSPIRE Network Services Conceptual Model



Automatic Image Processing Algorithms development and adaptation

1. Digital Image Processing
(Automatic Features Extraction)

OCEanArchNetwork – Ocean Archives Network

Aim:

Build na European Historic Marine Spatial Data Infrastructure for promote the rescue and sharing of Hydrographic Data collected before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