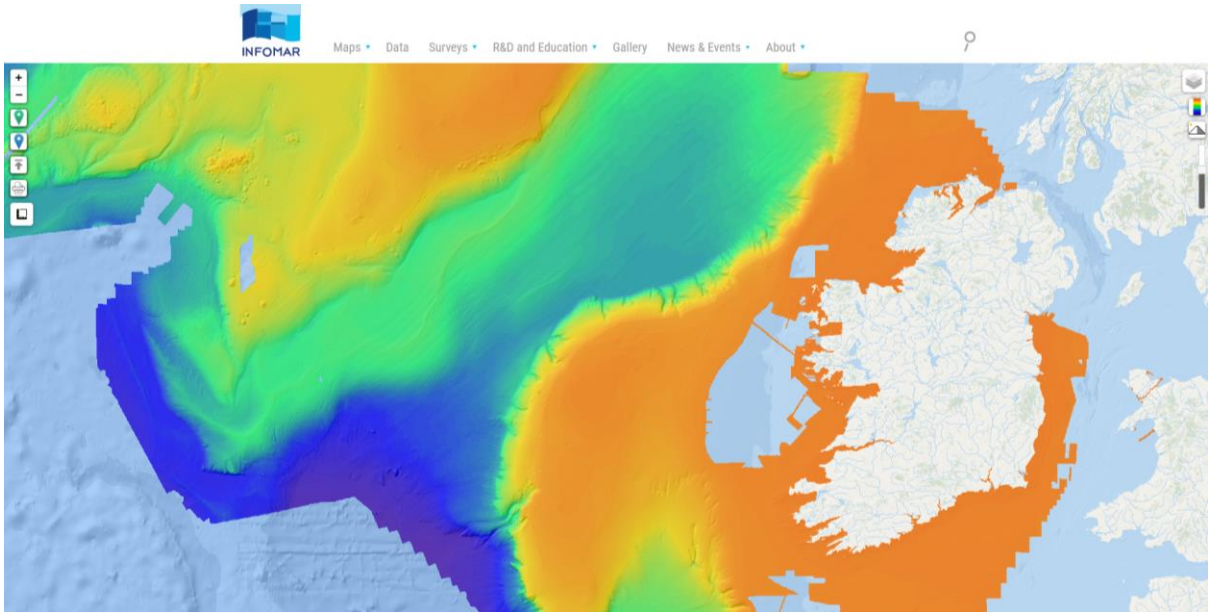
INFOMAR
Integrated Mapping for the Sustainable Development of Ireland's Marine Resource

INFOMAR Data Access Policy and Guideline



Rialtas na hÉireann
Government of Ireland

Foras na Mara
Marine Institute

Geological Survey
Suirbhéireacht Gheolaíochta
Ireland | Éireann

Contents

Issue	Date	Description	changes	Author	Approved
1	10-2023	V1.0	First draft	Fabio Sacchetti	Ramona Carr
2	02-2024	V2.0	Data accuracy section added	Sean Haughton	Fabio Sacchetti

1. Introduction

INFOMAR (Integrated Mapping for the Sustainable Development of Ireland's Marine Resource) provides valuable marine data that are used across many sectors nationally and internationally.

To ensure the quality, accuracy, and reliability of INFOMAR data, users are strongly encouraged to follow these guidelines for obtaining and acknowledging the data.

Data users should access INFOMAR data exclusively through the official INFOMAR website (www.infomar.ie), data portals, viewers, and associated Web Map Service (WMS) and ArcGIS REST Web Service. These official channels are continuously monitored and updated to provide the latest available data.

INFOMAR strongly discourages obtaining data from third-party data harvesting portals or through general internet searches. These sources may provide outdated or unreliable information that does not align with INFOMAR's rigorous data quality standards.

2. INFOMAR data licence agreement

Data provided by the INFOMAR programme are free for use based on the Government of Ireland Open Data Licence policy, under the conditions of Creative Commons Attribution 4.0 International license. More information can be found at the following links:

- https://creativecommons.org/licenses/by/4.0/
- https://creativecommons.org/licenses/by/4.0/legalcode

3. INFOMAR data attribution and acknowledgement

Under the CC-BY Licence, users must acknowledge the source of the Information in their product or application. Please use this specific attribution statement:

"Contains Irish Public Sector Data (Geological Survey Ireland & Marine Institute) licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence".

All public documents, reports, and banners should carry the following detailed acknowledgement:

INFOMAR is Ireland's national seabed mapping programme and is funded by the Department of Environment, Climate and Communications (DECC). It is jointly managed by Geological Survey Ireland and Marine Institute and is tasked with fully mapping Ireland's territorial waters for the sustainable development of Ireland's marine resource. INFOMAR will continue until the end of 2026, enabling effective management and accelerated growth to support Harnessing Our Ocean Wealth.

Where space limitation is a problem, a shorter version is provided below:

INFOMAR is the Department of Environment, Climate and Communications (DECC) funded national seabed mapping programme, jointly managed, and delivered by Geological Survey Ireland and Marine Institute.

In cases where it is not practical to use the statement users may include a URL or hyperlink to a resource that contains the required attribution statement.

4. INFOMAR Data Accuracy

Data available on the INFOMAR Data Download portal represents the current extent of processed bathymetry & backscatter data held by INFOMAR.

These datasets are live and will continue to be augmented as coverage is supplied from INFOMAR's seabed mapping programme. Not all surveys are currently available for download.

"Entire Area" datasets are classified as a "Digital Elevation Model" and are gridded at 10m, 25m & 100m resolution for bathymetry and 10m & 40m for backscatter.

"Survey Leg" datasets meet minimum standards for hydrographic surveys as set by The International Hydrographic Organisation. Specifically, all INFOMAR survey leg data meet the following criteria:

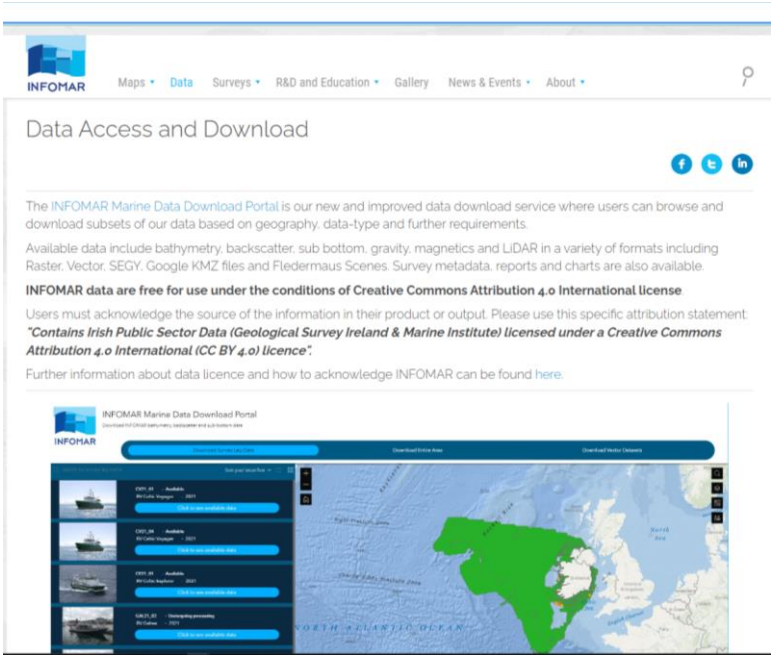
i. Order 2
ii. Order 1a

While INFOMAR endeavours to provide accurate and up-to-date information, it cannot guarantee accuracy and completeness of gridded data due to factors such as environmental conditions, limitations of technology and limitations of legacy survey data.

Although these data are of high quality and can be useful for planning and modelling purposes, they are not suitable for navigation.

5. INFOMAR primary data portal

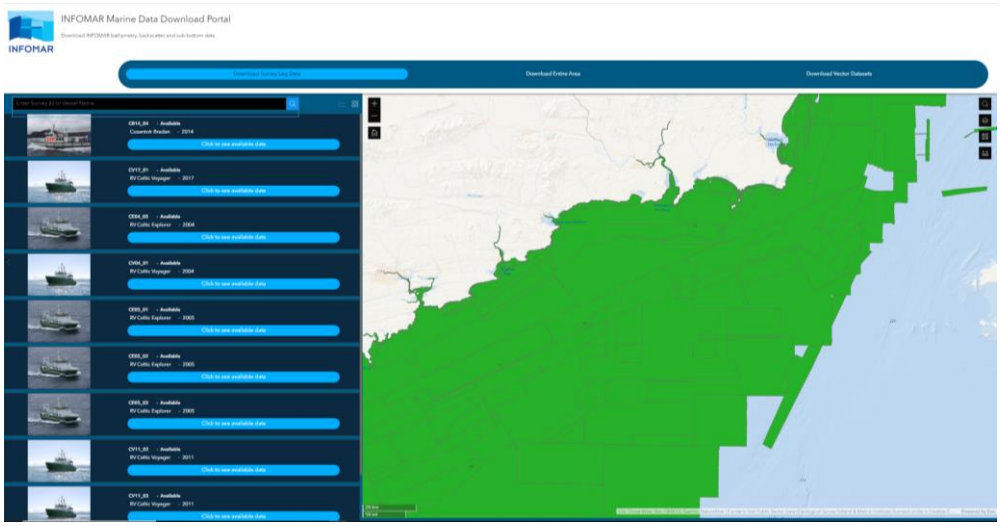
The primary portal where to find the most up to date data is listed below. This portal is subdivided into three main tabs as explained in the following sections.



https://www.infomar.ie/data

4.1 Individual surveys data sources

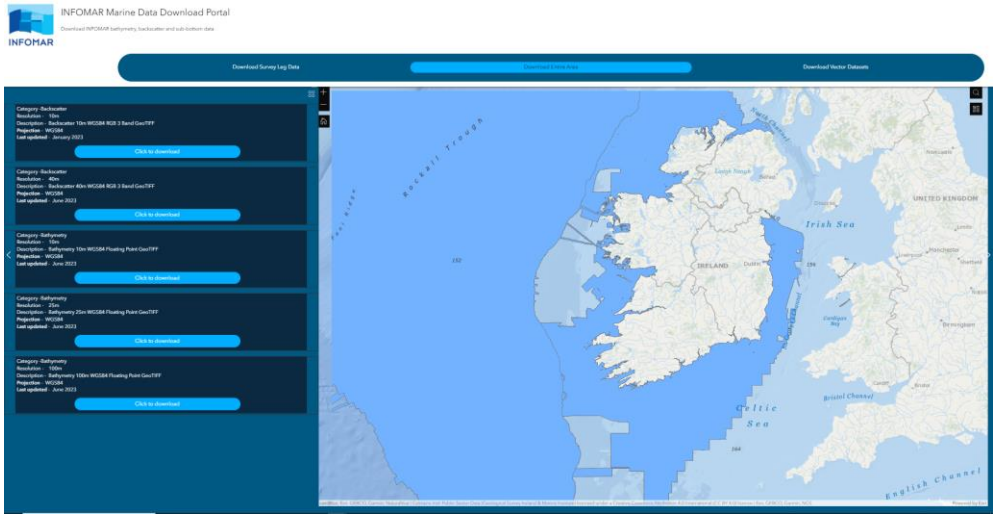
From this tab user can select individual surveys, check available metadata and download available associated datasets, including high resolution bathymetry, backscatter, sub-bottom data and survey reports.



https://experience.arcgis.com/experience/3f2815ec89e745d2b65630429d06385c/page/Page-1/?views=Download-Survey-Leg-Data

4.2 Bathymetry and backscatter merged grids

From this page, users can download merged bathymetry and backscatter grids at lower resolution for the entire continental shelf or deeper areas.



https://experience.arcgis.com/experience/3f2815ec89e745d2b65630429d06385c/page/Page-1/?views=Download-Entire-Area

4.3 Vector databases

This page includes the most up to date vector shapefile databases for:

- Substrate sediment classification:
  - Shows the different types of materials that make up the seabed.
- INFOMAR mapped shipwrecks:
  - Shows the location of shipwrecks mapped in Irish waters and shipwreck details.
- INFOMAR collected sediment samples:
  - Shows the location and details of sediment samples taken from the seabed, collected during surveys.
- Survey seabed coverage:
  - Shows the areas where the seabed has been mapped in Irish waters and details of the survey leg.
- Seabed Survey Tracklines:
  - Shows the route of the vessels as they surveyed the seabed.
- Sub-bottom Profile Tracklines:
  - Shows the route of the vessels as they collected Segy sub-bottom profile (SBP) data. SBP data shows the rock features and the sediment layers that are below the seabed. (Under development more segy data coming soon).

https://experience.arcgis.com/experience/3f2815ec89e745d2b65630429d06385c/page/Page-1/?views=Download-Vector-Datasets

6. INFOMAR data viewers

For users that don't have access to GIS software's, INFOMAR provides a variety of data viewers that enable to visualise and interrogate the data using any standard internet browser.

The following are the most frequently used portals.

Dynamic Bathymetric Viewer: Advanced interactive web mapping viewers where you can view and interrogate INFOMAR data.

Seabed and Sediment Viewer: Visualise bathymetry, backscatter, sediment samples and sediment classification layers.

Data and Sub-Bottom Profiles Viewer: A comprehensive portal capable to visualise all INFOMAR layers and help the user to interrogate the availability and quality of sub-bottom profiler data. Instructions on how to utilise this specific functionality is available here.

Shipwreck viewer: A viewer dedicated to the visualisation of all INFOMAR mapped shipwrecks and download of shipwreck reports.

Charts viewer: A viewer that provide preview and download functionalities for all INFOMAR created bays and coastal charts.

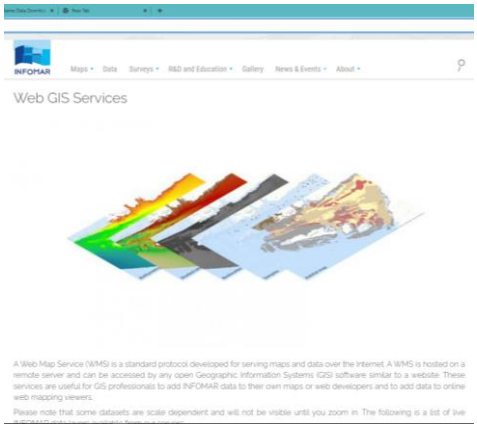
Map viewer: A viewer that provide preview and download functionalities for all INFOMAR created bays and coastal maps.

7. INFOMAR WMS and ArcGIS REST services

All essential INFOMAR raster and vector datasets are accessible through ArcGIS Online services, WMS (Web Map Service), ArcGIS REST services, and Google Earth services.

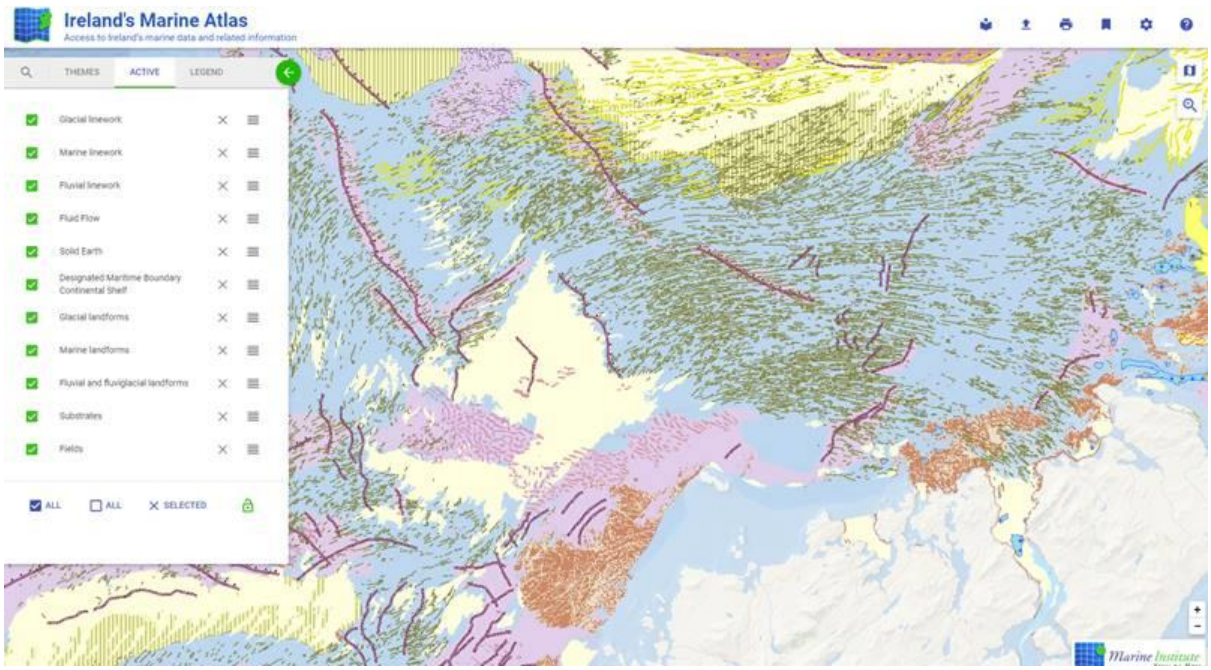
https://www.infomar.ie/services

These services are maintained and regularly updated to provide users with the most current data. To access INFOMAR data efficiently, users are encouraged to connect their GIS platforms to the provided services. Instructions on how to connect GIS software to the services are provided within at the foot of the webpage.



Backscatter	REST	ArcGIS Online	ArcMap	Google Earth
	Image service displaying greyscale images of backscatter data, this gives an indication of seabed hardness.			
Bathymetry	REST	ArcGIS Online	ArcMap	Google Earth
	Image service displaying bathymetry or water depth as gridded elevation values.			
Sediment Classification	REST	ArcGIS Online	ArcMap	Google Earth
	Vector service showing broad scale classification of seabed into various sediment types such as rock, sand, mud etc.			
Shipwrecks	REST	ArcGIS Online	ArcMap	Google Earth
	Vector service showing shipwrecks locations associated information on identified wrecks			
Sediment Samples	REST	ArcGIS Online	ArcMap	Google Earth
	Vector service showing sediment sample locations with description of samples and images where available			
Surveys	REST	ArcGIS Online	ArcMap	Google Earth
	Vector Service showing INFOMAR survey area boundaries with links to survey reports			
Tracklines	REST	ArcGIS Online	ArcMap	Google Earth
	Vector Service showing INFOMAR survey tracklines and associated information			

8. INFOMAR geomorphology layer



A new Geomorphology layer for the entire Irish continental shelf has been released by the Marine Institute in Q2 2023.

This project initiative, funded by the Marine Institute and delivered by a research group in UCC and MI offer the first harmonised geomorphology classification of the entire Irish continental shelf.

This dataset can be visualised and downloaded from the Irish Marine Atlas (available under the Geology theme).

https://atlas.marine.ie/#?c=55.4278:-8.4608:10

9. INFOMAR additional data need

Data queries or any additional data request not met by the portals and links provided on previous sections can be sent to:

data@infomar.ie

Alternatively, a data request can be submitted to the Marine Institute here.