

UNIVERSITY OF TWENTE.

OPEN MAPS FOR EUROPE

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FACULTY OF GEO-INFORMATION SCIENCE AND EARTH OBSERVATION

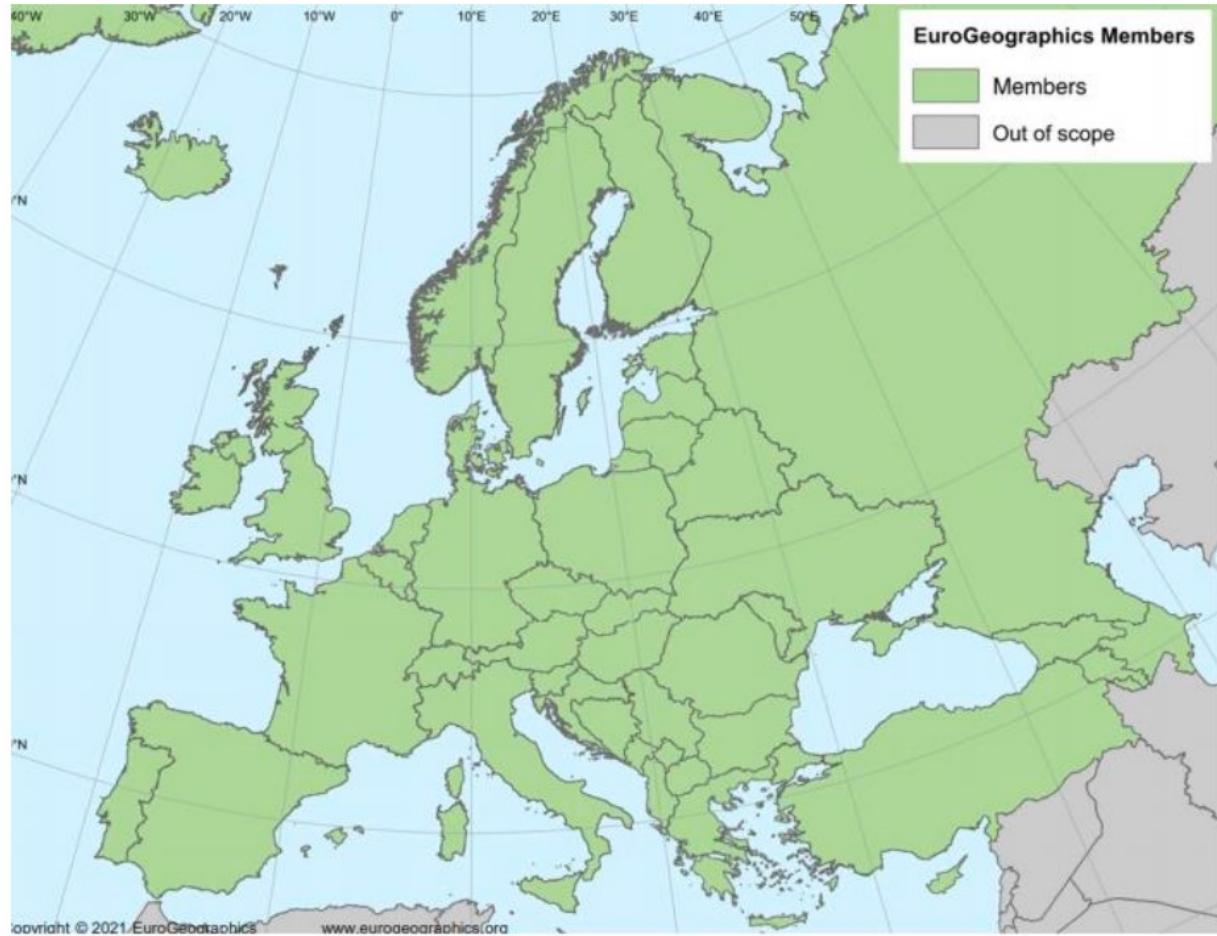
OME IS AN INITIATIVE OF EUROGEOGRAPHICS

Eurogeographics is a European cooperation of :

- Mapping agencies
- Cadastral agencies
- Land registries



60+ members **46 countries**
from the whole of geographical Europe



<https://www.eurogeographics.org/>

OPEN MAPS FOR EUROPE

- Opening up Pan European datasets
 - Technical platform giving access to digital maps of Europe and pan-European datasets
 - Dissemination, impact and sustainability
-
- Production of pan-European harmonised datasets:
 - EuroGlobalMap
 - **EuroRegionalMap**
 - EuroDEM
 - Open Cadastral map, Imagery, Gazetteer, etc.

<https://www.mapsforeurope.org/>

EURO REGIONAL MAP COVERAGE

Currently covers:

- 24 EU member states + UK
- 4 EFTA states
- Plus: Georgia, Moldova, North Macedonia, Ukraine, Andorra, Liechtenstein, Monaco, Vatican City, San Marino, Faroe Islands, Isle of Man, French overseas departments

Outlines only for:

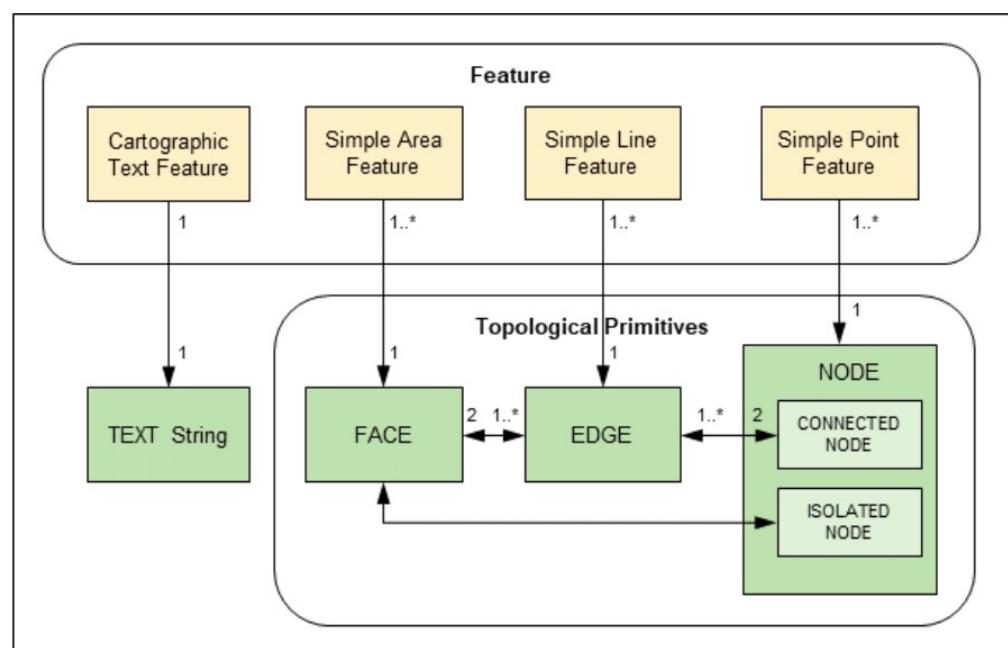
- Belarus, Guernsey, Jersey, Sint Maarten and Turkey

*Updated every year
(but not all themes)*



EURO REGIONAL MAP SPATIAL DATA

- Vector data - *reference scale 1:250.000*
- two-dimensional geographical coordinates, degrees (longitude, latitude) :
 - Spatial reference system = ETRS89 with ellipsoid GRS80 (difference with WGS84 “is negligible”)
 - Not projected. Projections that are recommended are Lambert Azimuthal Equal Area (EPSG:3035) or Lambert Conformal Conic (EPSG:3034)
- Harmonized data model
 - geometry
 - attributes (*themes*)



EURO REGIONAL MAP FEATURE ATTRIBUTES

Thematic themes:

- Administrative Boundaries (BND)
- Hydrography (HYDRO)
- Named Location (NAME)
- Miscellaneous (MISC)
- Settlement (POP)
- Transportation (TRANS)
- Vegetation and Soils (VEG)

All described in the specification documentation (PDF).

Railway Station		AQ125
Definition:	A stopping place for the transfer of passengers and/or freight.	
Feature class:	RAILRDC	
Feature type:	Point	
Primitive type:	Connected node	
Portrayal criteria:	All the stations and stopping places used for passenger traffic and/or freight traffic.	
Quality criteria:	All stations and stopping places should be named. Each railway station must have a unique railway station identifier.	

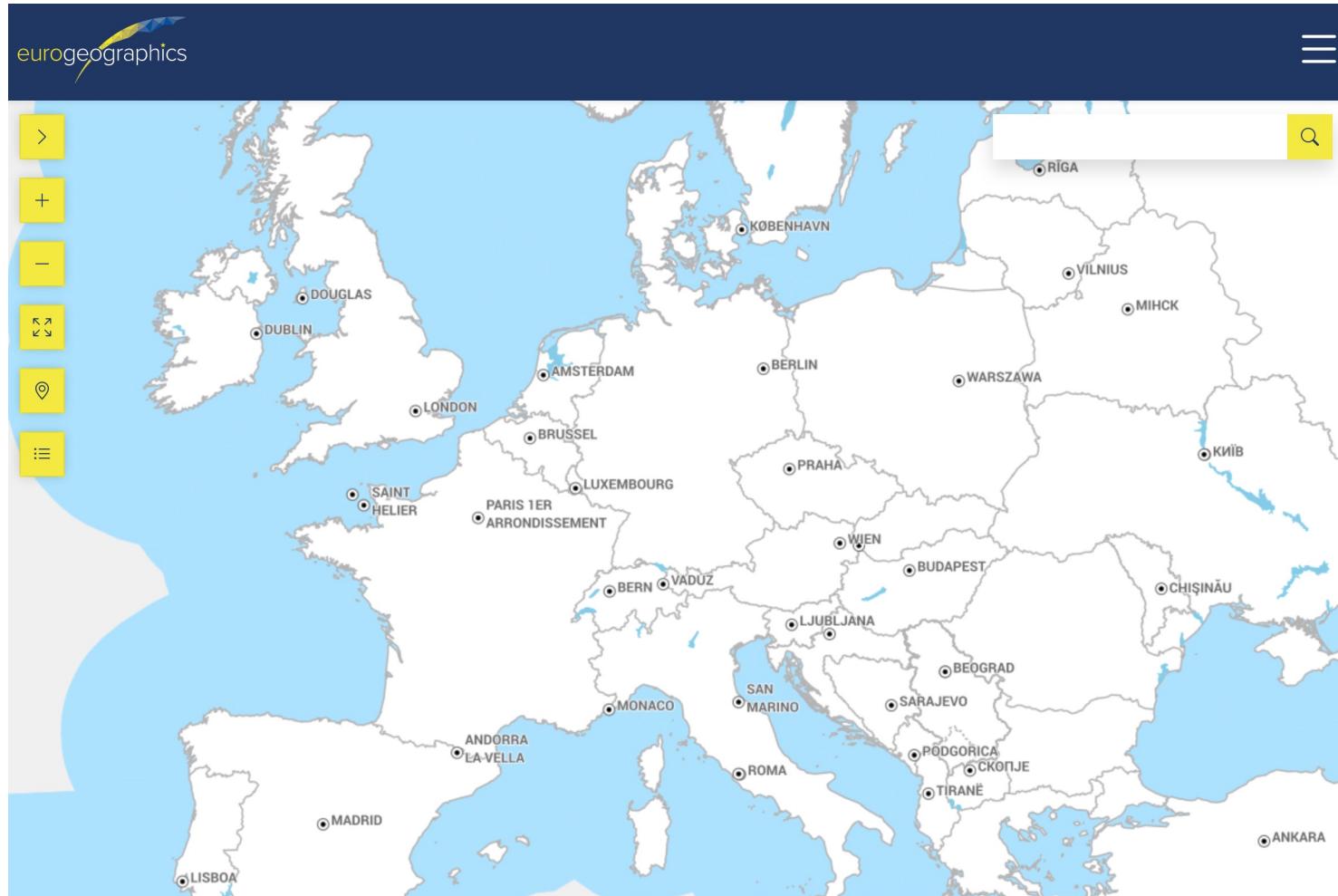
Attributes:

TFC	Transportation Facility Type
	Data type: Short integer
	Domain: Coded value
-32768	Unknown, unpopulated, not applicable, no value
15	Railway Station
31	Joint Railway Station
32	Halt
33	Marshalling Yard
34	Intermodal Rail Transport Terminal
NAMN1	Name in first national language
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
NAMN2	Name in second national language
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
NAMA1	Name in first national language (ASCII-7bit)
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
NAMA2	Name in second national language (ASCII-7bit)
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
NLN1	ISO 639-2/B 3-Char Language Code for NAMN1
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
NLN2	ISO 639-2/B 3-Char Language Code for NAMN2
	Data type: Character
	Domain: Actual value
UNK	Unknown, unpopulated, not applicable, no value
RStationID	Railway station Identifier
	Data type: Character
	Domain: Actual value
TUC	Transportation Use Category
	Data type: Short integer
	Domain: Coded value
-32768	Unknown, unpopulated, not applicable, no value
25	Cargo/Freight
26	Passenger
45	General

ACCESSING EUROREGIONALMAP

Previews (WMS), are available through the online mapviewer:

<https://www.mapsforeurope.org/explore-map/egm-erm-basemap>



ACCESSING EUROREGIONALMAP

- **Web Map Service** (WMS), raster map with preset styling
- **Web Feature Service** (WFS), the raw vector data
- **Download** of the vector data

For all access you need to apply for a **token** at the website
<https://www.mapsforeurope.org/access-data>

The screenshot displays a user interface for selecting datasets. Each dataset card includes a thumbnail, a title, a description of file types and sizes, and download/service buttons.

- EuroGlobalMap**: GeoPackage - 434.1Mb zip, Shapefile - 399.7Mb zip, WFS, WMS, WMST, Last Update: 02/2024. Buttons: Download, Web Service.
- EuroRegionalMap**: GeoPackage - 3.0Gb zip, File GDB - 1.2Gb zip, Shapefile - 2.6Gb zip, WFS, WMS, WMST, Last Update: 05/2023. Buttons: Download, Web Service.
- EuroDEM**: Tiff - 2.5Gb zip, WMS, WMST, Last Update: 04/2022. Buttons: Download, Web Service.
- Open Cadastral Map**: WMS, WMST, Last Update: November 2022. Buttons: Web Service.
- Pan-European Imagery**: WMS, Last Update: 2018. Buttons: Web Service.
- Open Gazetteer**: Geopackage - 124.0Mb zip, WFS, WMS, WMST, Last Update: 11/2023. Buttons: Download, Web Service.

The email content is as follows:

Hello,

Thank you for your request for Open Maps for Europe services. Please find your access token and the list of services below that you now have access to. This is your credential for connecting to the service(s), for example, in desktop and web applications.

A copy of the licence and dataset documentation is included in downloads. For Web Services, please see the dataset information page for further details.

If you request additional services in the future, they will be applied to the same e-mail and token. Please note that your token is unique to you so do not share it with others.

If you have received this email by mistake, please delete it.

Kind regards,

EuroGeographics

Your Token

ImV1cm9nZW9ncmFwaGjlc19yZWdpC3RlcMvkXzQ4NSI.FEgtEA.CkBTCKn-Nrf3DGOKSYrcDmvckWE

EuroDEM - WMS

<https://www.mapsforeurope.org/maps/wms?SERVICE=WMS&VERSION=1.3.0&REQUEST=GetCapabilities&token=ImV1cm9nZW9ncmFwaGjlc19yZWdpC3RlcMvkXzQ4NSI.FEgtEA.CkBTCKn-Nrf3DGOKSYrcDmvckWE>

EuroDEM - WMST

<https://www.mapsforeurope.org/maps/wmts?SERVICE=WMTS&VERSION=1.0.0&REQUEST=GetCapabilities&token=ImV1cm9nZW9ncmFwaGjlc19yZWdpC3RlcMvkXzQ4NSI.FEgtEA.CkBTCKn-Nrf3DGOKSYrcDmvckWE>

ACCESSING EUROREGIONALMAP

Web Map Service (WMS), raster map with preset styling

<https://www.mapsforeurope.org/maps/wms?VERSION=1.3.0&token=<token>>

The screenshot shows a GIS application interface with two main panels. On the left is a 'Create a New WMS/WMTS Connection' dialog, and on the right is a map of a coastal region.

Create a New WMS/WMTS Connection (Left Panel):

- Connection Details:**
 - Name: EuroRegionalMap WMS
 - URL: <https://www.mapsforeurope.org/maps/wms?VERSION=1.3.0&token=lmV1cm9>
- Authentication:** (checkboxes for None, Basic, OAuth, and Client Certificate)
- Layers:** (Buttons for Layers, Layer Order, and Tilesets)
- EuroRegionalMap WMS:** (dropdown menu)
 - Connect
 - New
 - Edit
 - Remove
 - Load
 - Save
- Search:** (text input field)
- Table:** (List of connections)

ID	Name	Title	Abstract
0	thinkWhere ...		
1	erm	EuroRegional...	
2	default	default	
3	egm	EuroGlobalMap	
5	eurodem	EuroDEM	

ACCESSING EUROREGIONALMAP

Web Feature Service (WFS), the raw vector data:

<https://www.mapsforeurope.org/maps/wfs?VERSION=1.1.0&token=<token>>

The screenshot shows a GIS application interface. At the top left is a "Connection Details" panel with fields for "Name" (set to "EuroRegionalMap 1:250k") and "URL" (set to the WFS URL). To the right is a main window titled "EuroRegionalMap 1:250k" containing a map of Europe with yellow outlines representing geographical features like roads and rivers. Below the map is a table listing three feature types from the WFS:

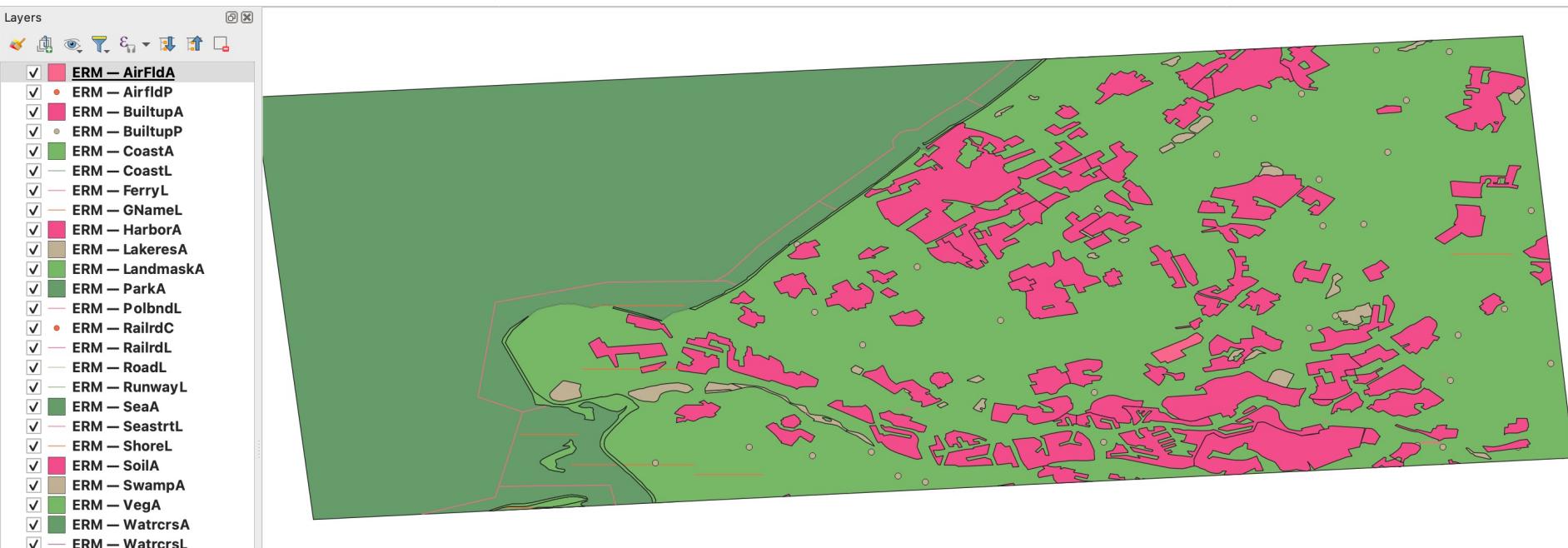
Title	Name	Abstract	Sql
Euro Regional Map runway for WFS	ome:erm_wfs_runway		
Euro Regional Map roadl for WFS	ome:erm_wfs_roadl		
Euro Regional Map restc for WFS	ome:erm_wfs_restc		

ACCESSING EUROREGIONALMAP

■ Download of the vector data:

Details: <https://www.mapsforeurope.org/datasets/euro-regional-map>

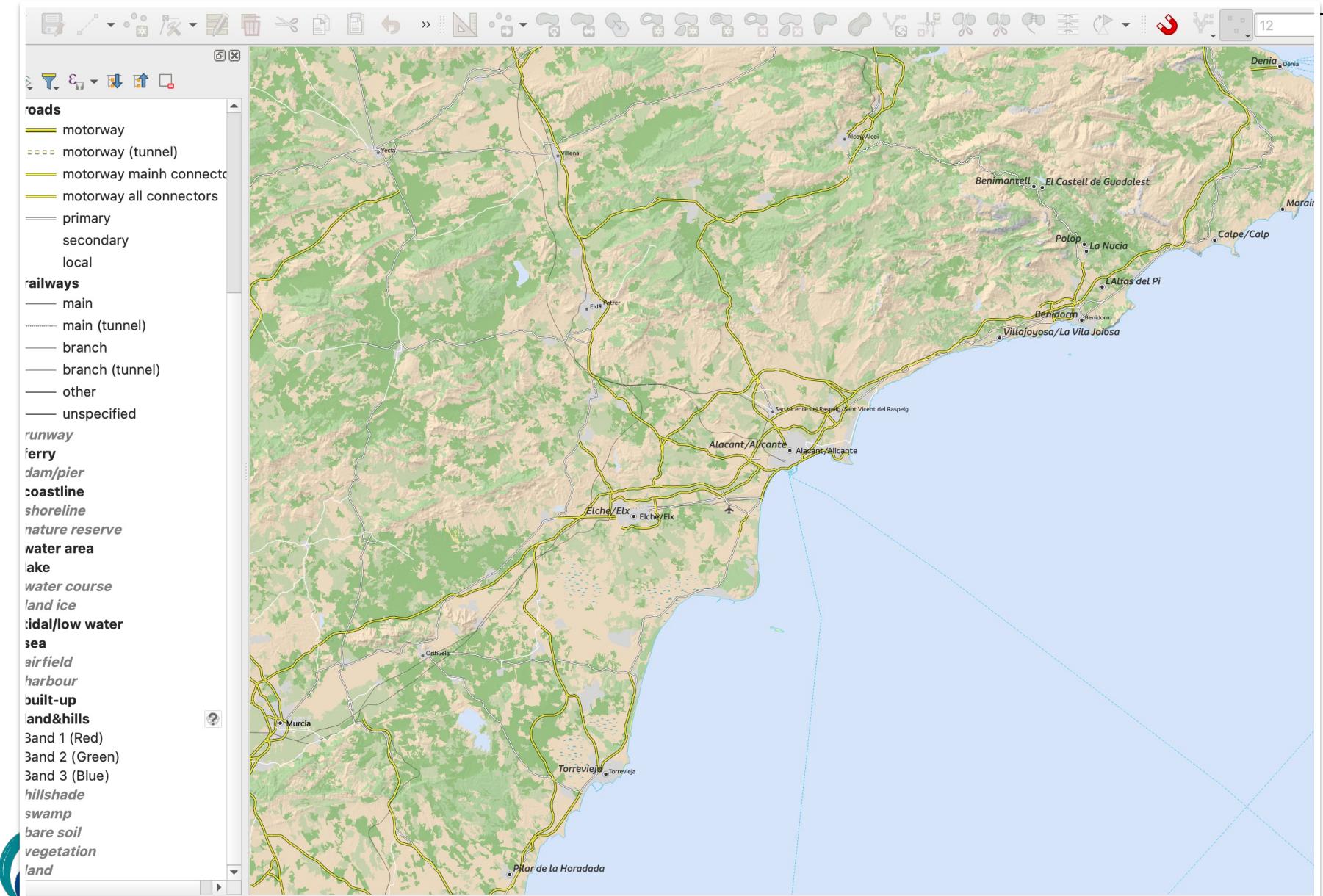
- [GeoPackage](#) - 3.0Gb zip
[in this workshop we use a small excerpt]
- ESRI FileGeodatabase - 1.2Gb zip
- ESRI Shapefile - 2.6Gb zip



EXAMPLES: ERM STYLED FOR PRINT IN QGIS



EXAMPLES: ERM + EURODEM STYLED FOR PRINT



EXAMPLES: ERM + EURODEM IN ILLUSTRATOR



EXAMPLES: EGM + EURODEM IN QGIS



EXAMPLES: EGM IN ILLUSTRATOR

