



Making Maps with Open Data and Open Source Software

Hands on workshop using R and QGIS

Anja Eggert, 14 October 2024

[You can download the R code here:](https://github.com/AnjaEggert/Workshop-ORDS-Meets-the-Sea-.git)

```
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the-Sea-.git
```

[We use following R libraries:](#)

basic packages:

```
tidyverse      # tidy universe  
viridis        # nice colours  
readxl         # read Excel files, if needed
```

spatial packages we use:

```
rnaturalearth  # vector data of the world  
terra          # read raster data, also NetCDF  
tidyterra      # plot terra raster objects  
sf             # read vector data, also shapefiles
```

```
ggspatial      # adding scale bars and north arrows
icesDatras     # acces ICES survey data
icesVocab      # look up species codes
```

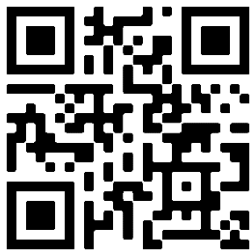
optional spatial packages:

```
ggmap          # also possible
osmdata        # retrieve OSM or Google maps
maps           # to make very basic maps
```

Please install the libraries if required:

```
# for instance the tidyverse package
install.packages("tidyverse")
```

[We use following Open Source Data:](#)

Data	QR-code	Short URL
Copernicus Marine Data Store: Baltic Sea		https://qrco.de/bfTkTE
IOW Baltic Sea topography		https://qrco.de/bfTU8U

IOWDB - the Oceanographic Database of IOW		https://qrco.de/bfTmnq
icesDatras R package on GitHub		https://qrco.de/bfTmgc
HELCOM Metadata catalogue: Baltic Sea Drainage Basin		https://qrco.de/bfTTXa
HELCOM Metadata catalogue: Baltic Sea Bathymetry		https://qrco.de/bfTUam
HELCOM Metadata catalogue: Baltic Sea Coastline		https://qrco.de/bfTTiA
Eurostat Data Browser: population size		https://qrco.de/bfTVxU