Project Fisheries - FRB Cesab training

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The project is available on github

1. R work environment



Targets to manage our workflow



renv to make our R environment reproducible



rmarkdown to generate both this presentation and a Latex report



ggplot2 to visualize our data

2. Question

How much carbon (C), nitrogen (N), and phosphorus (P) is extracted every year from the Barents Sea through fishing?



2. Data

2.1. Data extracted

- Carbone (C), Nitrogen (N), Phosphorus (P) content (% of dry mass) from Jabot, F. et al., (2020): Dataset for the article "Body stoichiometry of heterotrophs: assessing drivers of interspecific variations in elemental composition". figshare. Dataset. https://doi.org/10.6084/m9.figshare.13366310.v1
- **Tonnage** from *Sea Around Us* We downloaded data for the Barents Sea area on the Website: https://www.seaaroundus.org/



• Taxonomic data from the Global Biodiveristy Information Facility (GBIF)



2.2. Data manipulation

Having two different dataset has required to join them. However, the species name were not exactly noted the same way on the two documents. Therefore we had to do some cleaning on both datasets.

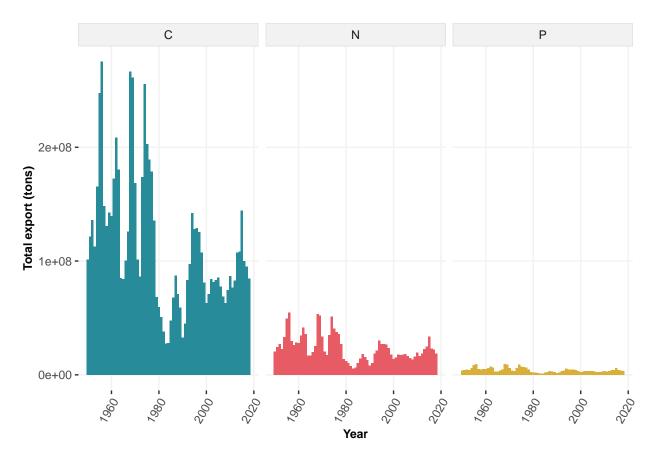
2.3. Final dataset

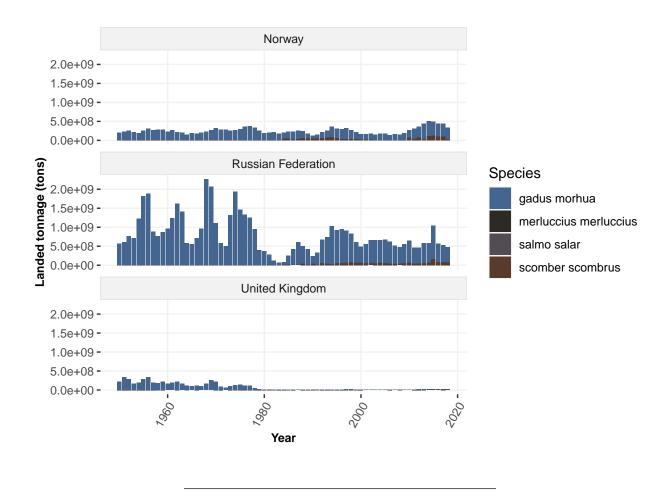
Our final dataset contains:

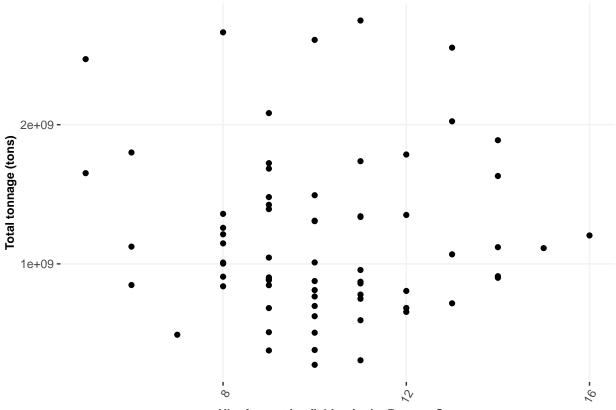
- * Carbone (C)
- * Nitrogen (N)
- * Phosphorus (P)
- * Species (n species of fishes)
- * Tonnage
- * Countries
- * Type of gear

3. Analyses and vizualisation

Representation of our results







Nb of countries fishing in the Barents Sea

4. Workflow

 $vizualisation of tar_visnetwork$

