

# Improving the Analysis of Fisheries Data: An Introduction to R and the Fisheries Library in R (FLR)



FISHREG  
Maritime Affairs Unit - IPSC  
European Commission  
Joint Research Center

## Day 1 - Summary

- Installed R and RStudio
- Took a tour of RStudio
- R basics:
  - How to get help (`?`, `RSeek`, ...)
  - Objects (single values, vectors, data frames)
  - Assignments (`<-`)
  - Operations (`+`, `mean`, `log()`, ...)
  - Vectors (subsetting)
  - Special values (`Inf`, `NA`, `NaN`)
  - Introduction to plotting

## Day 2 - Summary

- Load data stored in text files
- Plot data and results
- Data exploration and analysis
- **for** loops
- Mapping

## Day 3 - Summary

- Introduced **arrays**
- Introduced **FLCore** package
- **FLQuant** - the heart of **FLCore**
- **FLStock** objects

## Day 4 - Summary

- Introduced **lists**
- Introduced **functions**
- Introduced **FLCore** package
- **FLIndex** objects
- **FLStocks** and **FLIndices** objects
- Tutorial on VPA
- Demo using FLXSA
- Demo on FLa4a
- **!! stock assessment contest !!**

## Day 5 - Summary

- Creating an FLStock and FLIndex from text files
- Introduction to length slicing in FLa4a

## Usefull web pages

`https://github.com/iagomosqueira/RforFisheries`

`http://tyflr.flr-project.org`

`http://www.rseek.org`