

# Reading data into FLR

*13 February, 2017*

This tutorial details methods for reading various formats of data into R for generating the FLStock() object class.

## Required packages

Youen !!!

To follow this tutorial you should have installed the following packages:

- CRAN: ggplot2
- FLR: FLCore, ggplotFL

You can do so as follows,

```
install.packages(c("ggplot2"))  
install.packages(c("ggplotFL"), repos="http://flr-project.org/R")
```

```
# This chunk loads all necessary packages, trims pkg messages  
library(FLCore)  
library(ggplotFL)
```

## SECTION

PD

### SubSECTION : Reading files (csv, dat, ...) - YV

#### Reading common fisheries data formats

FLCore contains functions for reading in fish stock data in common pre-defined formats. The functions can handle the following formats: **Lowestoft VPA**, **Adapt**, **CSA** and **ISA**.

##### **Lowestoft VPA**

readVPAFile()

**Subsection : Reshaping data as a matrix - YV**

**Subection : Making an FLQuant object - PD**

**Subsection : Description, units, ranges etc.. - PD**

## **References**

## **More information**

- You can submit bug reports, questions or suggestions on this tutorial at <https://github.com/flr/doc/issues>.
- Or send a pull request to <https://github.com/flr/doc/>
- For more information on the FLR Project for Quantitative Fisheries Science in R, visit the FLR webpage, <http://flr-project.org>.

## **Software Versions**

- R version 3.3.1 (2016-06-21)
- FLCore: 2.6.0.20170130
- ggplotFL: 2.5.9.9000
- ggplot2: 2.1.0
- **Compiled:** Mon Feb 13 14:22:20 2017

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