

# Training Course USING FLR FOR QUANTITATIVE FISHERIES ADVICE



FISHREG  
Maritime Affairs Unit - IPSC  
European Commission  
Joint Research Center

# MONDAY

- Introduction to FLR
- FLCore
- FLQuant
- **Kell et al, 2007**

## TUESDAY

- **Wickam, 2010**

### AM

- FLStock
- Load data into FLR

### PM

- FLSR
- knitr and reproducible research
- Plotting with lattice and ggplot2

## WEDNESDAY

- **Schnute et al 2007**
- **a4a Report**

## AM

- Biomass dynamics stock assessment
- VPA & XSA

## PM

- a4a, an statistical catch-at-age
- FLAssess, FLXSA, FLa4a

## THURSDAY

- **Hilborn, 2003**

### AM

- Biological Reference Points
- Short and medium-term forecasting

### PM

- Stochastic projections
- Intro to MSE
- Catch up, Q&A

# FRIDAY

- Run your own analysis in groups



# FINAL REMARKS

## Quantitative Fisheries Science can be fun

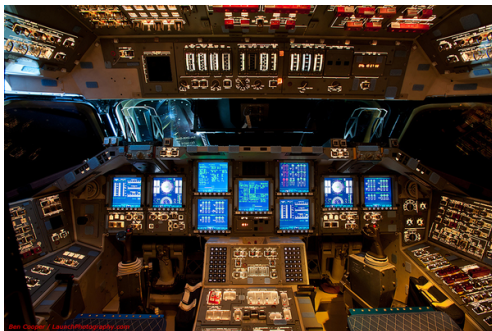




## Data analysis is sexy



## FLR is not that difficult



and it is open to everybody



## FINAL REMARKS

- The power of programming vs. the learning curve
- Models as data-exploration tools, ask questions
- R as lingua franca: open exchange
- Document your work, allow replicability