



Agenda

Course on Management Strategies Evaluation with FLR/a4a

Ispra, Italy/JRC site

25-29 Novembre 2019

**The European Commission's
science and knowledge service**

Joint Research Centre

Welcome !!

- round table
- logistics
 - cafeteria for morning cappuccino
 - mensa for lunch
 - WCs
 - emergency plan (if nuclear stay in)
 - nuclear emergency tests (none this week ?!)

Instructors

- Iago Mosqueira (WUR)
- Christoph Konrad (JRC)
- Cecilia Pinto (JRC)
- Paris Vasilakopoulos (JRC)
- Ale Mannini (JRC)
- Ernesto Jardim (JRC)

Course

- First time for us !
- Expect some chaos, confusion, code revisions, new versions, etc.
- Two sides
 - you'll learn
 - we'll learn
- Proceed around two examples of evaluations of management procedures.
- The examples will be used to present concepts and ideas of MSEs and each of its components.
- R studio server.
- If you bring your own data we may have the opportunity to look into it Tuesday.

Timetable:

- 09:00 - 10:30
- 11:00 - 12:30
- LUNCH
- 13:30 - 15:00
- 15:30 - 17:00

Programme outline:

- Day 01 MSE concepts and introduction to FLR and the a4a MSE platform.
- Day 02 Operating model conditioning.
- Day 03 Observation error model and estimation of stock status or trends.
- Day 04 Harvest control rules, implementation systems and implementation error.
- Day 05 Summarising results and tools for dialogue.

Social activities (not mandatory, join only if you feel like it):

- Sunday 19:00: Beer and/or aperitivo in the bar below Hotel Europa. Let's meet for a first get-together-and-know-each-other event.
- Wednesday 19:00: Music jam. Only for musicians. If you don't play an instrument or sing there's still time to learn. Playing will be around Jimi Hendrix, Miles Davis, Herbie Hancock, Tool, and anything else we'd like to play. No need to bring instruments.
- Thursday 19:00: Course dinner. Pizza and beer somewhere around Ispra.

Detailed agenda

MONDAY - MSE concepts and intro to FLR and a4a MSE platform.

- 09:00 - 09:30 (s01): Welcome and introduction to the course
- 09:30 - 10:30 (s02): [../day01/s02/handson/quickFLR.R] SETUP of FLR packages and github repository (P)
- 11:00 - 11:45 (s03): Introduction to MSE (T)
- 11:45 - 12:30 (s03): Discussion (T)
- 12:30 - 13:30 LUNCH
- 13:30 - 15:00 (s04): Running MSE analysis with the a4a platform (P)
- 15:30 - 17:00 (s05): The a4a framework elements and classes (P)

TUESDAY - Operating model conditioning.

- 09:00 - 09:45 (s01): Operating model (T)
- 09:45 - 10:30 (s01): Discussion (T)
- 11:00 - 12:30 (s02): Condition the OM using stock assessment fits (P)
- 12:30 - 13:30 LUNCH
- 13:30 - 15:00 (s03): Condition the OM using life history (P)
- 15:30 - 17:00 (s04): Conditioning OMs hands-on (P)

WEDNESDAY - Observation error model and estimation of stock status or trends.

- 09:00 - 09:45 (s01): Writing your own functions for $mse()$ (P)
- 09:45 - 10:30 (s02): Observation error model explained (T)
- 11:00 - 12:30 (s02): OEM hands-on (P)
- 12:30 - 13:30 LUNCH
- 13:30 - 14:15 (s03): Estimator explained: stock status or trends (T)
- 14:15 - 15:00 (s03): Estimator hands-on (P)
- 15:30 - 17:00 (s03): Estimator hands-on (cont.) (P)

THURSDAY - HCR, implementation systems and implementation error.

- 09:00 - 09:45 (s01): Harvest Control Rules (T)
- 09:45 - 10:30 (s01): Discussion (T)
- 11:00 - 12:30 (s01): HCRs hands-on(P)
- 12:30 - 13:30 LUNCH
- 13:30 - 14:14 (s02): Implementation system explained (T)
- 14:15 - 15:00 (s02): IS hands-on (P)
- 15:30 - 16:15 (s03): Implementation error model explained (T)
- 16:10 - 17:00 (s03): IEM hands-on (P)

FRIDAY - Summarising results and tools for dialogue.

- 09:00 - 09:45 (s01): Performance statistics (T)
- 09:45 - 10:30 (s01): Discussion (T)
- 11:00 - 12:30 (s01): Performance statistics hands-on (P)
- 12:30 - 13:30 LUNCH
- 13:30 - 14:15 (s02): Visualizing MSE results for stakeholder benefit (T)
- 14:15 - 15:00 (s02): Visualizing hands-on (P)
- 15:30 - 16:45 (s03): Discussion (T)
- 16:45 - 17:00 (s04) Goodbye (P)