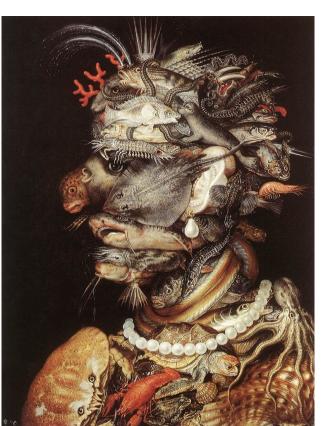European Commission

Introduction to R for Fisheries Science

Varese & Ispra, January 2013

JRC – IPSC
Maritime Affairs Unit
FISHREG

Ernesto Jardim

Colin Millar

Iago Mosqueira

Chato Osio

Joint Research Centre

Objectives

- R environment
- Introduce R from FS perspective
- First taste of FLR
- Get you to code, it is good for you
- Lose the fear of coding
- Join the ~~mafia~~ community

Logistics

- Timetable: 9.00-12.30 & 14.00-17.30
- Lunch at Palace Hotel or nearby
- WED: Dinner in town
- Some restaurants
  - Bologna, Via Broggi, 7.
  - Aart Hotel Varese "Al Pravello", Via Bertini 3.
  - Al Vecchio Convento, Viale Luigi Borri 348.
  - Premiata Gnoccheria e Risotteria, Via Carlo Cattaneo, 1.

Joint
Research
Centre

Outline - Day 01

- Installing and understanding the system
- Introduction to R
- Getting help
- Data types
- Basic operations
- Data manipulation
- Plotting
- Importing your data

Outline - Day 02

- Writing functions
- Programnming
- Fitting basic models
- Mapping
- Extra plotting

Outline – Day 03

- Introduction to FLR
- Loading and inspecting data
- S4 classes and methods
- Exploratory Data Analysis using FLR
- Short open session

Chato Osio

JRC Fishreg: STECF MED, SA, DCF

University of New Hampshire (USA): Historical fisheries, SA

WWF/IATTC: Fisheries certifications and bycatch

University of Pisa (Italy): Marine Ecology

Joint
Research
Centre

Iago Mosqueira

JRC Fishreg: MSE, FLR, IOTC

Cefas (UK): MSE, FLR

AZTI Tecnalia: Tropical Tuna (ICCAT, IOTC, IATTC)

Imperial College London: Bayesian Geostats MAC

IOTC WPTT & WPM

Ernesto Jardim

JRC Fishreg: STECF, MSE, FLR

Ipimar: SA, data collection, HKE, FLR

University of Algarve

University of Lisbon

Colin Millar

JRC Fishreg: MSE, STECF, FLR

Marine Scotland (UK): Statistician, Stock Assesment, ICES

St Andrews University (UK): Applied Statistics