The JRC "assessment for all" (a4a) Initiative

Management Strategies Evaluation (MSE) Small Research Project

Call for case studies (2016)

INTRODUCTION

Management Strategy Evaluation (MSE) algorithms are increasingly applied by the fisheries science community to provide management advice and evaluate risks to stocks and fisheries.
The constant increase in available computational power, together with growing coding abilities among fisheries scientists, have substantially enhanced the potential for these methods to be quickly deployed.

The FLR project (http://flr-project.org) has been contributing to the development and implementation of MSEs and the JRC a4a Initiative[1] is focused on simplifying MSE development and implementation.

The JRC has a long experience in training and hands-on workshops on R/FLR/a4a methods.

[1] https://ec.europa.eu/jrc/en/scientific-tool/assessment-all-a4a-enhancing-fisheries-modelling

a4a SMALL RESEARCH PROJECT

With the aim of developing and implementing MSE algorithms using R/FLR/a4a based approaches, the JRC a4a Initiative will carry out a Small Research Project (SRP) in 2016.

This SRP will be supported by the JRC through the organization of workshops, with the possibility of travel expense reimbursement, provision of computational facilities, collaboration tools (git), training in FLR and a4a, and technical support of JRC scientists in developing and implementing the MSEs.

The SRP is build around a combination of applied research, training, analysis as well as documentation of progress using real life problems ('case studies'), so that the participants will benefit from the discussions about the implementation and design of the MSE, while the results can then be used for answering to current requests for fisheries management advice or research needs.

The SRP will be organized around a set of case studies and the development of MSEs to reply to specific research question(s). The case studies should be proposed by potential participants, which are encouraged to think about applying these methods to real life situations, such as current or future requests for advice on multi-annual management plans, case studies in research projects, etc.

The SRP will last for approximately 6 months. It includes 2 workshops with one week duration each, and a maximum of 4 case studies per workshop, depending on their size and complexity.

The first workshop will aim to:
- clarify the research question(s),
- provide training in advanced FLR/a4a methods,
- condition the operating models,
- discuss the harvest control rule(s),
- design the MSE simulations.

The second workshop will be dedicated to:
- discuss the MSE implementations,
- discuss results,
- analyse performance statistics,
- progress on communication of results.

Between the two workshops it is the responsibility of the participants to:
- finalize any coding and data preparation that was identified in the first workshop,
- run the analyses,
- present progress to the relevant stakeholders, if necessary
- prepare the results for discussion.

The workshop dates will be agreed among participants, the first must be in 2016 and the second should be 3 to 4 months after the first one.

The full set of results will be published as JRC Scientific and Technical reports, while submissions to scientific journals or conferences will be encouraged.

Please note: The focus of the SRP is on the numerical aspects and analysis of the MSE process. A full MSE process requires a number of interactions with stakeholders and managers to define and decide several details of the MSE design, presentation of results, which will be introduced to but not applied.

OPEN CALL FOR CASE STUDIES

To select case studies and partners the JRC is issuing an open call for case studies. Applications should be submitted until the **30th of April 2016** by email to ernesto.jardim@jrc.ec.europa.eu or iago.mosqueira@jrc.ec.europa.eu .

Each application should have a maximum of 2000 words and include:
- research question(s),
- description of the fishery(ies) and stock(s),
- description of the data and information available,
- human resources allocated to the case study,
- short CV of the team (max 3 persons), indicating level of expertise in quantitative methods and R/FLR.

The workshops will take place at the premises of the Joint Research Centre in Ispra, Italy.

While travel will be supported, selected participants will have to cover their accommodation and subsistence expenses for the duration of the workshops, provide the necessary data, and allocate appropriate human resources to carry out the analysis.

The candidates will be informed of the results of the evaluation of submitted proposals by the 15th of May 2016.