



SEAwise has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101000318



SEAWise EBFM Toolbox

- Detailed insight into the status of fisheries within the SEAWise case study regions
- Presents the results of SEAWise Research and enables users to interact with the data directly
- Technical outputs - requires subject matter knowledge
- Still under development – please provide feedback so that it can meet your needs
- All comments welcome: organization, layout, amount of supporting text required, summary information etc.



Enabling
EBFM

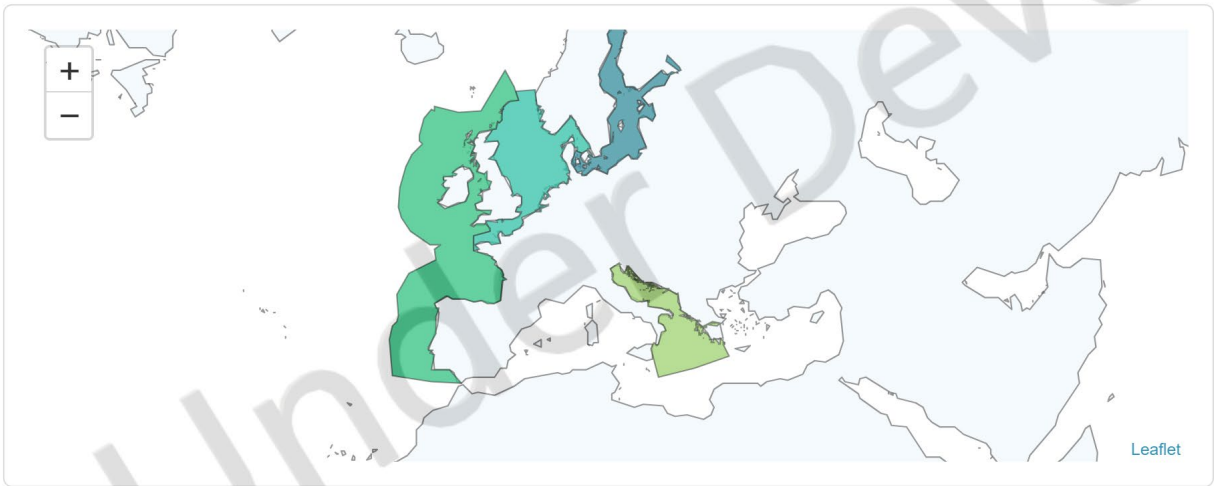


Welcome to the SEAwisE Ecosystem Based Fisheries Management Toolbox

Select a region below to learn about fisheries there or learn more about SEAwisE in *About*.

The [SEAwisE project website](#) contains additional information about the project.

SEAwisE also has a complementary and less technical [EBFM tool](#) for communicating the project results.



Please select a case study region

Featured SEAwisE Research

Partners

SEAwisE results were generated by a consortium of 24 partner institutes.

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Welcome [application landing page]

So welcome to the ebfm toolbox. This is the page that the user first sees when they open the toolbox. We have a navigation bar at the top where you can see the SEAwise project logo, a home tab, an about tab, a results tab and a resources tab.

The landing page itself is fairly simple. This page is designed to bring a returning user to the results that they are interested in quickly. But a new user may not know much about the SEAwise project and the welcome box encourages users to learn more about the SEAwise project in About, or by visiting the project website. There is also a link to the accessible EBFM tool.

So, if we follow the instruction to learn more about SEAwise and Click on the 'About' tab, it unfolds a drop down box. From here it is possible to select the SEAwise project, themes, case studies, SEAwise partners and publications. If we click on SEAwise Project, we can get an overview of the project, including the objective of the project, the research themes, the case studies.

Selecting themes or case studies from the drop down box will bring the user to pages explain these aspects of the project in greater detail.

Clicking on the home tab brings the user back to the landing page.



The map identifies the regions covered by SEAwisdom research, and the user can select the region of interest from the dropdown box to the right.

Before we do that you'll see that the landing page contains information about the project partners and funding.

There's a further box which will be used to highlight a research paper from the project.

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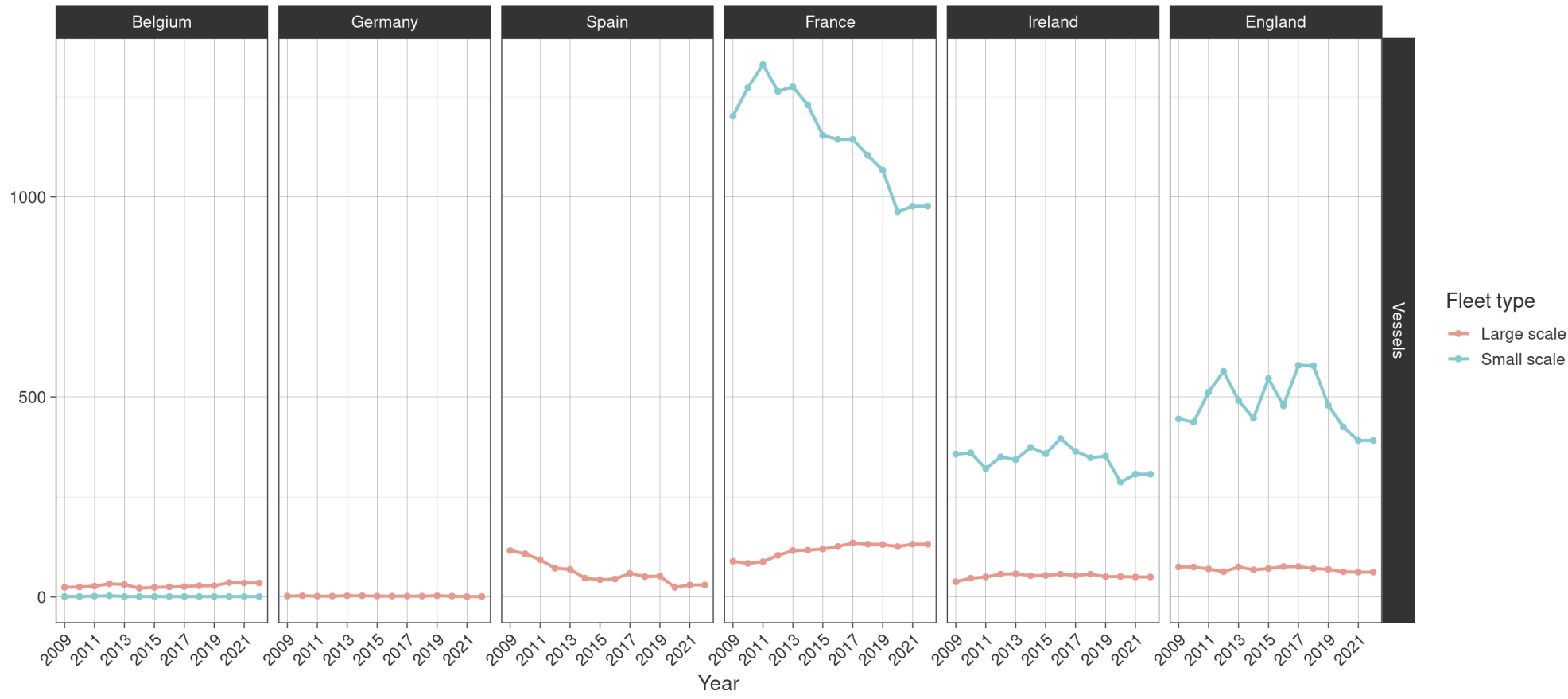
Select Countries

DE ES FRA IE UKE

BE

Select Fleet variables

vessels





Results

Selecting an ecoregion brings us to the corresponding results page. We can also use the dropdown button on the navigation bar to access the results for the various ecoregions.

Selecting Greater North Sea then, we see that the results are organised according the SEAwisdom themes where each has its own tab. We have Social and Economic Effects, Ecological effects on Fisheries, Ecological consequences of fisheries, Spatial Management Impacts and Management Strategy and Trade-off Evaluation.

Under the Selected Tab, we have further tabs and results relating to the parent topic.

Results : Social and Economic effects of fishing

The first tab, Social and Economic effects of fishing, is already selected. SEAwis research has generated results on The characteristics of Large- and Small-scale fisheries, Communities, Carbon Emissions, Fuel Use and Cost and Meal Provision. Within each of these tabs, a sidebar contains the controls for the plot. In this case, the user can select to view all combinations of countries and fleet variables, or they can select any particular combination of interest. It is possible to collapse the sidebar to create a larger viewing window, or to enter full-screen mode.

This layout, with a sidebar for the controls and an expandable window is the structure generally employed across the toolbox for displaying results.

Here we can see the characteristics of large and small scale fleets for countries fishing in the North Western Waters ares.

In the communities tab, the relative contributions of the large and small scale fleets to Gross Value Add, jobs and landings value.

Next we have the carbon emissions of the large and small scale fleets per country. The interaction of fuel price and fish price, and the number of meals provided in each country from catches of the different stocks.

The final tab in this section looks at projections for social and economic indicators under different climate and management scenarios.

Social and Economic Effects

Ecological effects on Fisheries

Ecological consequences of Fisheries

Management Strategy and Trade-off Evaluation

Select Stock

cod.27.7e-k

Select Management Scenario

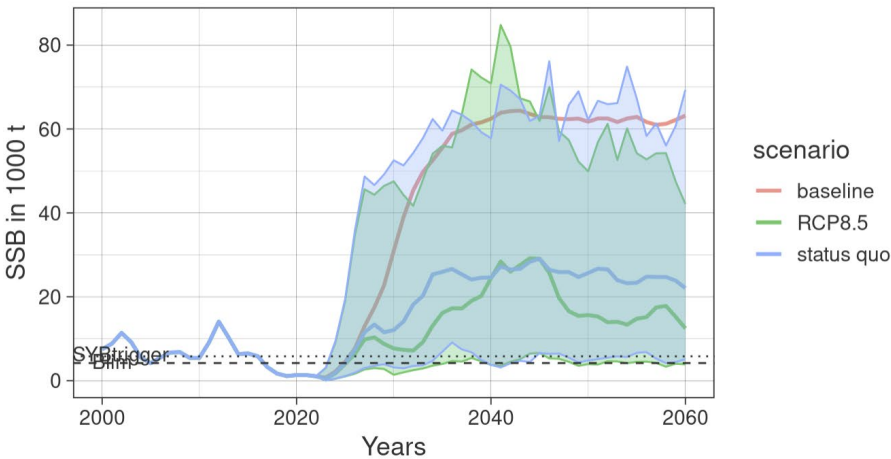
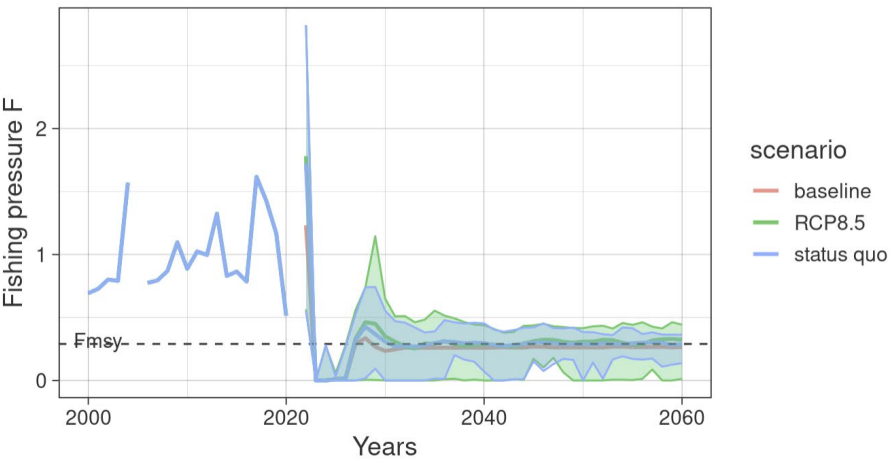
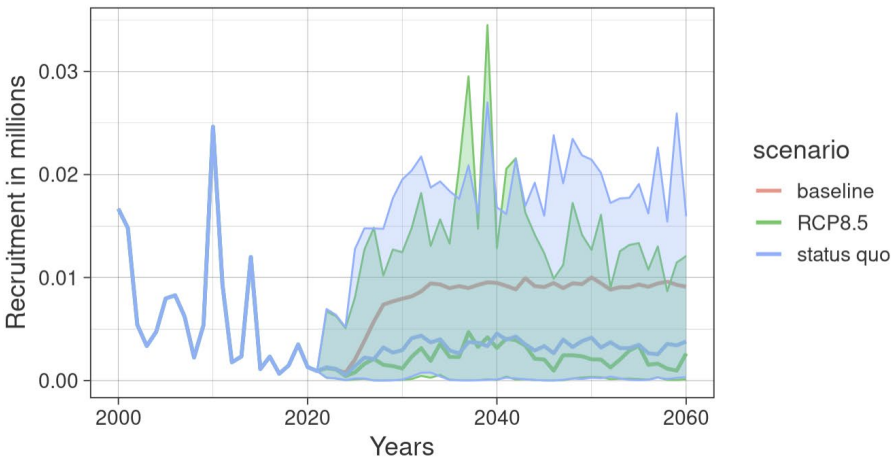
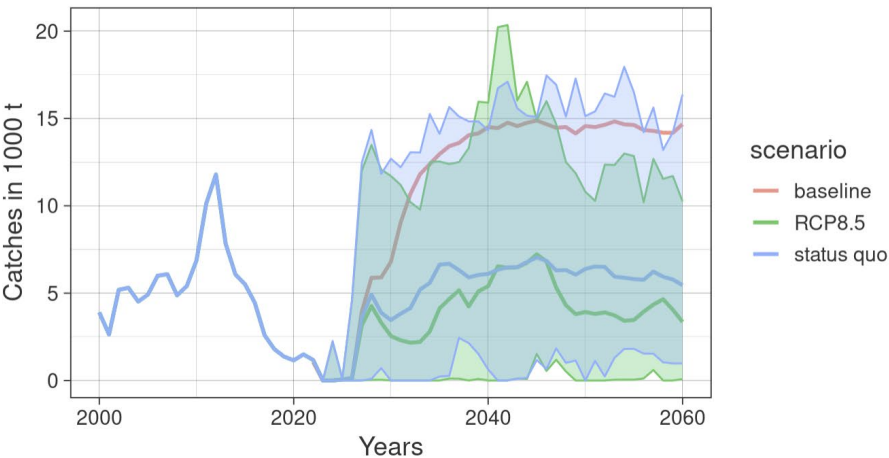
☒ FMSY

Select Climate Scenario

☒ status quo

☒ RCP8.5

☒ baseline



Environments effects of fishing

The next tab presents the work done to model the impact of environmental changes on fish stocks. SEAWise has considered a range of environmental variables to improve the modelling of stock dynamics. For many stocks, a range of different scenarios have been explored, and this tab allows us to explore the comparative predictions of stock catches, stock recruitment, Fishing Pressure, and Spawning Stock Biomass.

A further feature that we would like to develop for this tab is to provide insight a brief explanation of the different scenarios, as well insight into the environmental variables considered when developing the models and which were retained in the final models.

Social and Economic Effects

Ecological effects on Fisheries

Ecological consequences of Fisheries

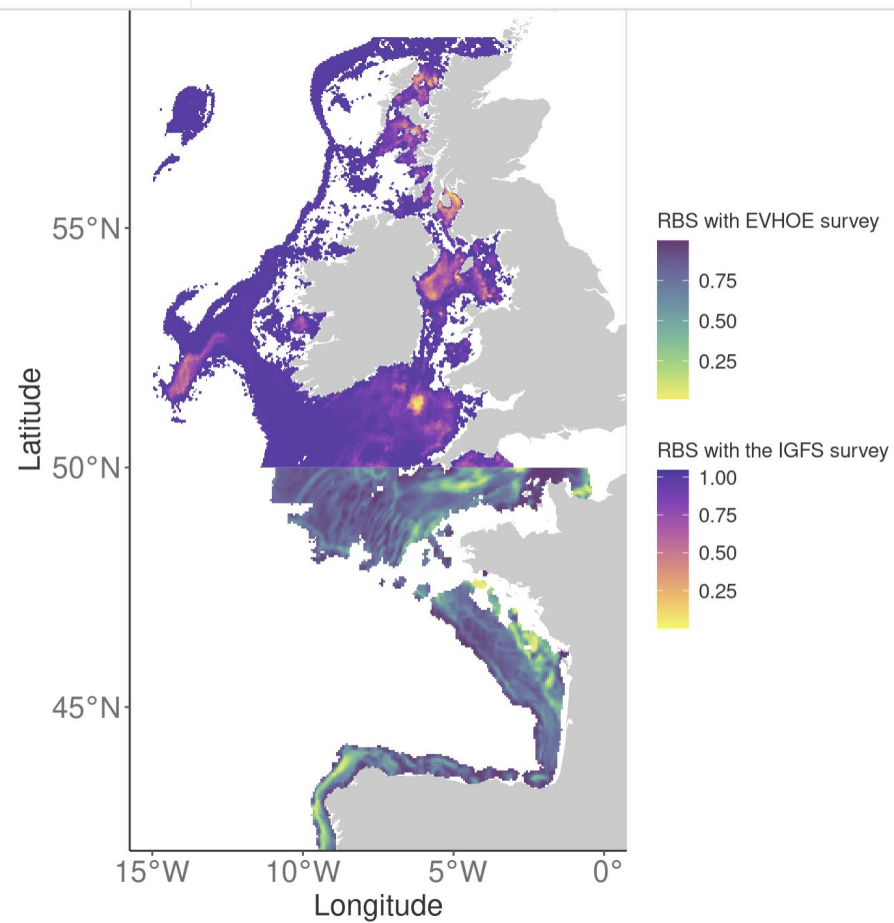
Management Strategy and Trade-off Evaluation

Relative Benthic State

Litter

Bycatch

Ecosystem Depletion Risk



Ecological Consequences of fisheries

The first tab under ecological consequences of fisheries presents SEAwis e results for Relative Benthic State.

The Litter tab presents model outputs for Fishing Related Litter in kg/km².

SEAwis e results for bycatch in the NWW case study cover bycatch mortality risk of harbour porpoises to netters in Irish Waters

Social and Economic Effects

Ecological effects on Fisheries

Ecological consequences of Fisheries

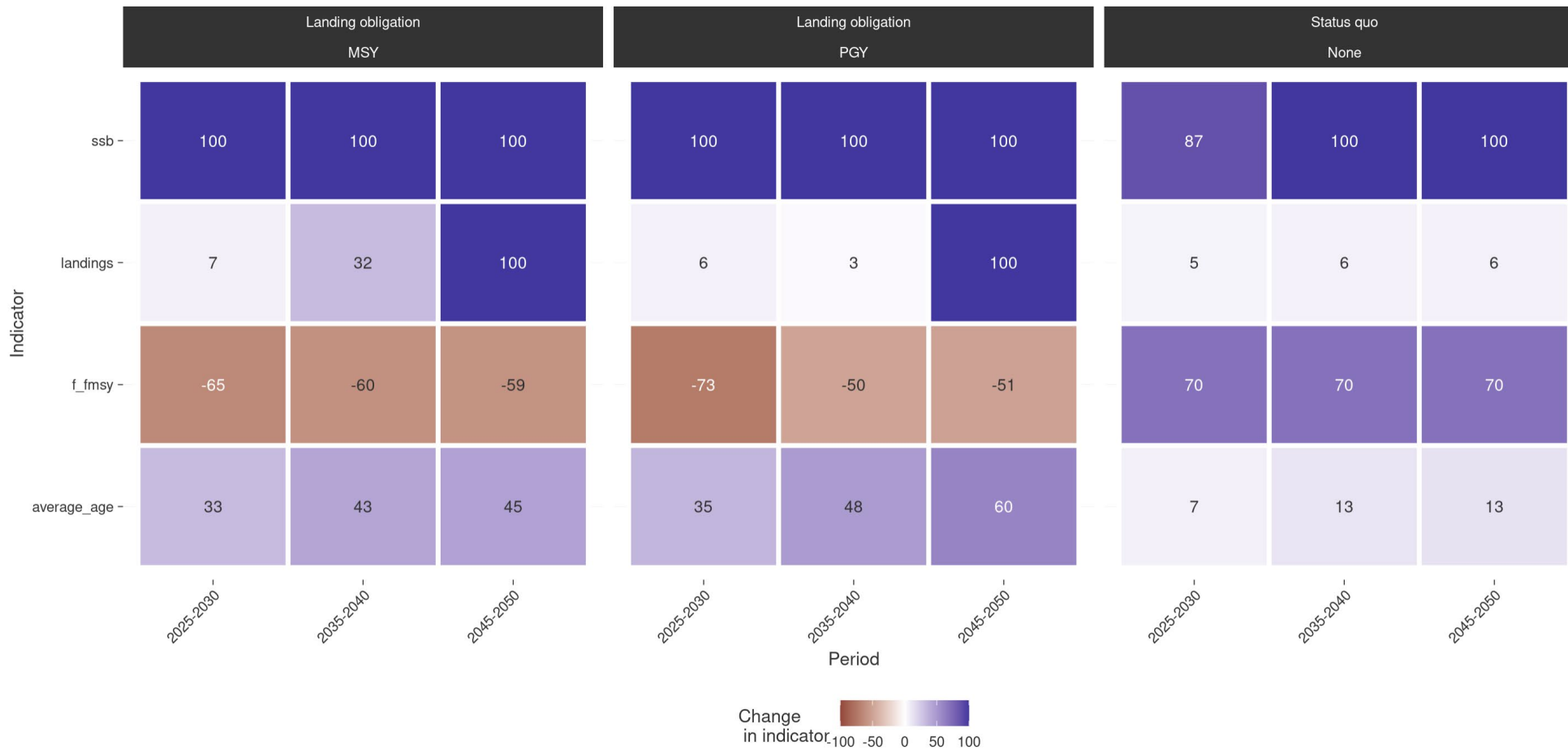
Management Strategy and Trade-off Evaluation

Management Strategy Evaluation



Select plot for display

Changes at Regional Level ▾



Management Strategy and Trade off evaluation

The final top-level tab in the results section is for Management Strategy Evaluation and Trade-off Analyses.

The first results that the user is presented with are for Management Strategy Evaluations, and the predicted regional level implications of different management scenarios through time compared to current status

The user also has the possibility to explore the stock level implications for Biomass, Fishing Pressure, Average age, etc. , and Fleet level results for landings and landing value.

Resources

The final tab – Resources – is still to be populated, but will contain links and references to SEAwise reports. There will be details on how the SEAwise project should be cited, as well as licensing information.

For now, if you have questions or any feedback you would like to provide about the EBFM toolbox, please feel free to contact me: neil.maginnis@ices.dk

<https://ices-tools-dev.shinyapps.io/SEAwiseTool/>