AZTI

MEMBER OF
BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

www.azti.es

Decision Support Tool for Optimizing Catches in Bottom Trawling

Elsa Cuende de Francisco

NSAC/EAPO Symposium on Innovative Fishing

Brussels, 7th March

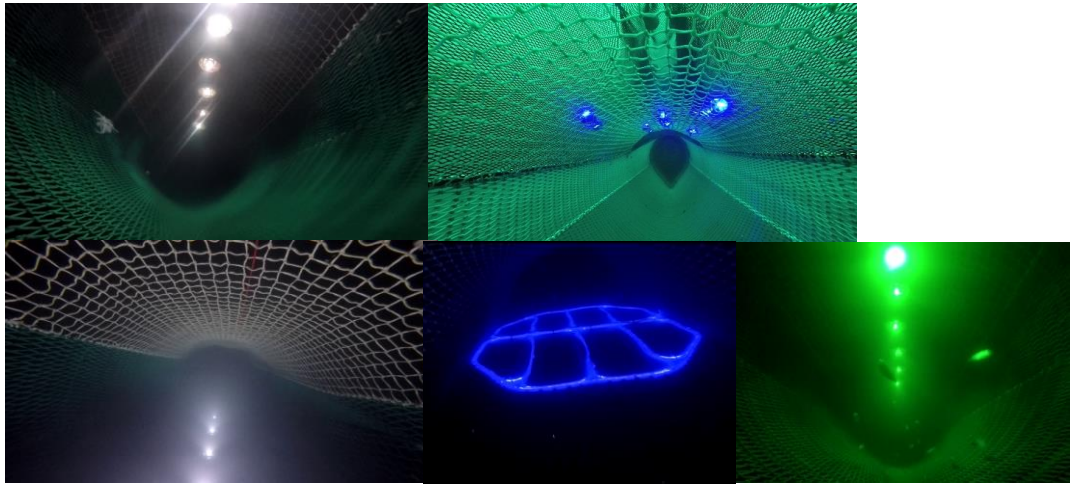
GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

Financiado por la Unión Europea
NextGenerationEU

Decision Support Tool for Optimizing Catches in Bottom Trawling

To improve bottom trawl sustainability and efficiency - 2 strategies

1) Implement fishing gear modifications – **Innovation in gear selectivity**

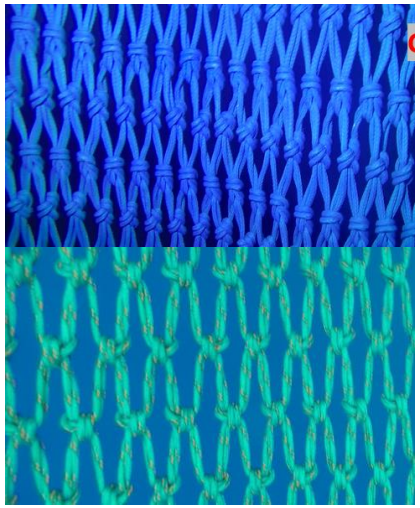


Visual stimulators

Hanging ratio

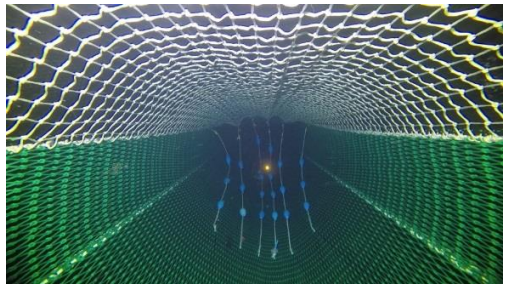
Species separation

Mesh orientation

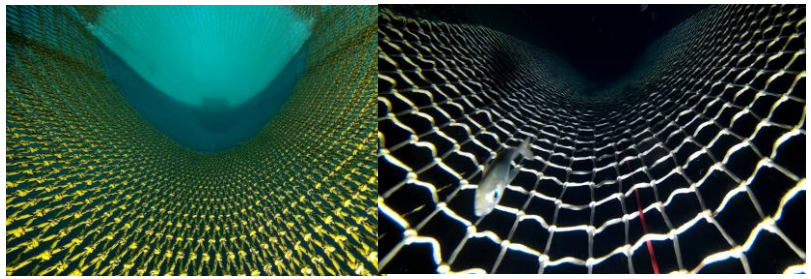


Not very convincing results

Improved selectivity for some species , but not for all



Mechanical stimulators



Size & position

Decision Support Tool for Optimizing Catches in Bottom Trawling

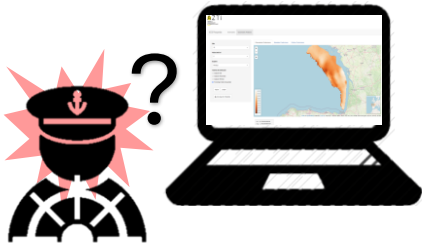
To improve bottom trawl sustainability and efficiency - 2 strategies

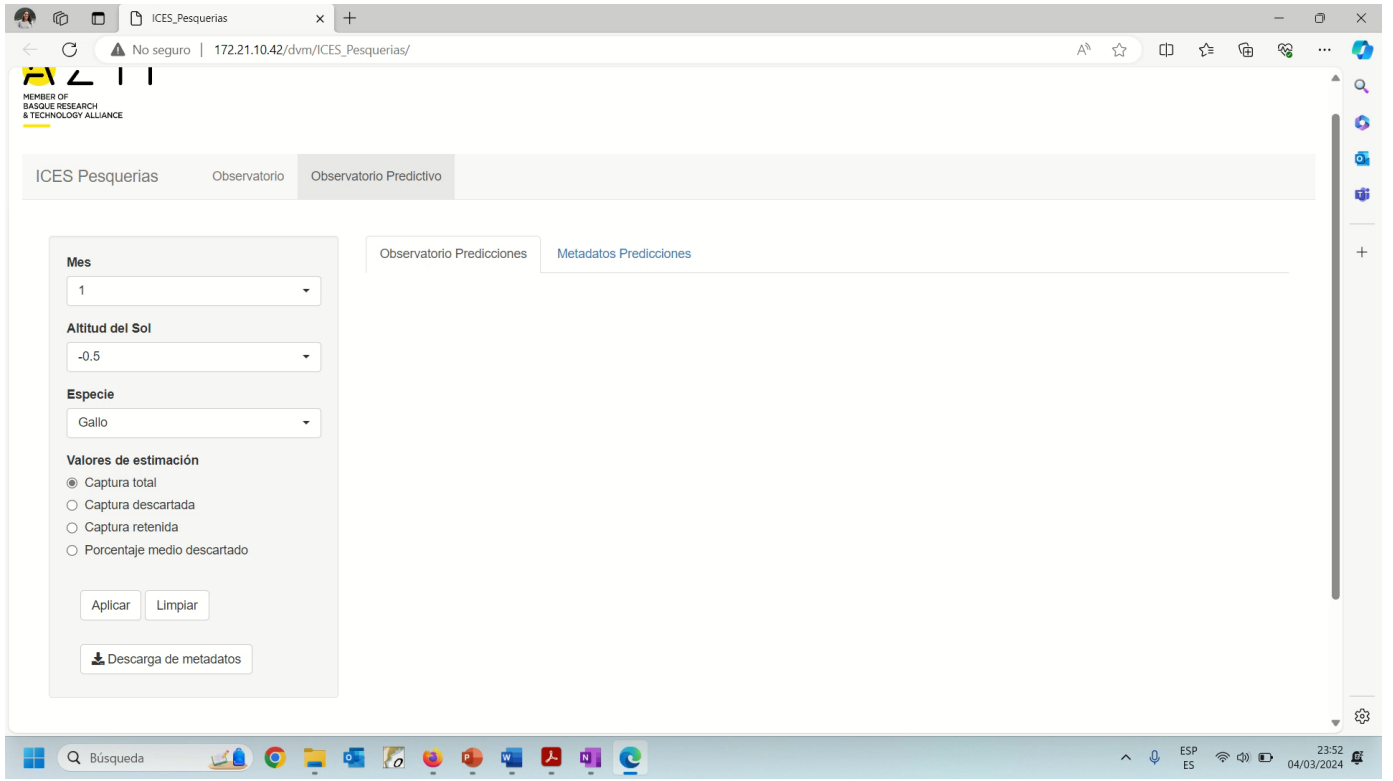
2) Allocating fishing effort– **A catch prediction tool to assist fishermen decision-making**

drivers

Aim 1:
optimize catch efficiency by avoiding high probability bycatch areas

Aim 2:
provide an easy-to-use tool for fishermen





Decision Support Tool for Optimizing Catches in Bottom Trawling

To improve bottom trawl sustainability and efficiency - 2 strategies

2) Allocating fishing effort– **A catch prediction tool to assist fishermen decision-making**

drivers

Aim 1: optimize catch by avoiding bycatch

Aim 2: easy-to-use tool for fishermen

Bottleneck 1 (in development): quality of baseline data
Bottleneck 2 (in implemenation): not complete elimination of unwanted catches
Bottleneck 3 (in implemenation): potential limited engagement

- **Takeaways**
- Data collected for control/policy-making → tools that provide direct benefits to the fishing industry
- *** statistical tools may overcome data limitation – uncertainty
- *** complementary use of gear modifications
- More efficient on avoiding unwanted catches and comply with LO
- *** LO penalties might not engage

Development / implementation process