DEEP VISION

Precision trawling for more sustainable fisheries

1st International Symposium on Catch Identification Technologies

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GCE Ocean Technology

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The fisheries are in crisis

- Almost 90% of global commercial fish stocks are overfished or fully exploited
- 1/3 of the stocks are overfished
- We need to feed a growing population that will reach 9,8 billion by 2050
- Global demand for seafood expected to almost double in this period
- The global fisheries loose approximately $83 billion a year

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We are wasting valuable marine resources in a world where we so desperately need them.

The Guardian

The Economist

The looming food catastrophe

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We need to find radically news ways to harvest from our fisheries resources!

Scantrol has served the fishing industry for more than 30 years

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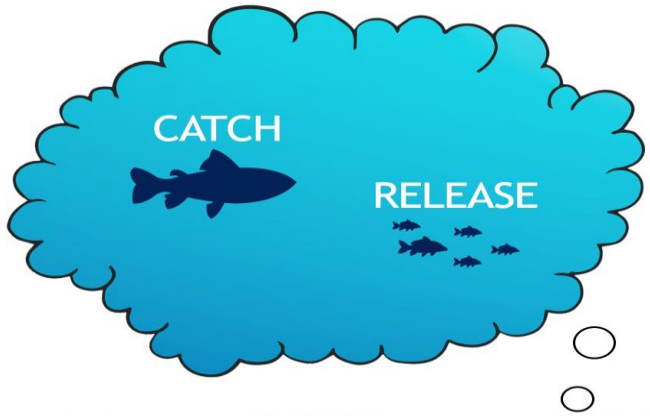
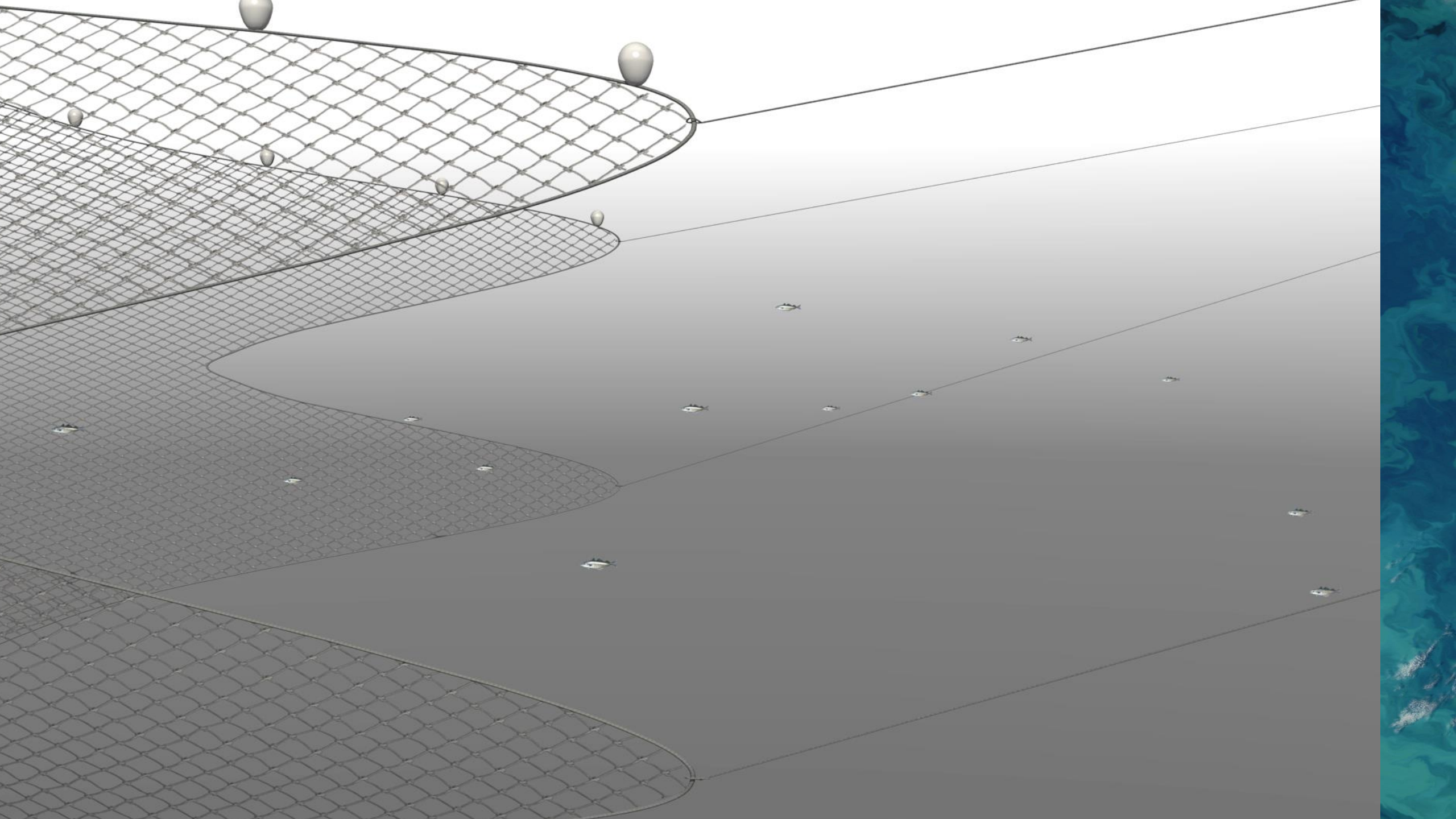
The skipper has limited information about the catch before it is on deck

Our mission is to give the skipper as much information as possible so that he can make the best possible decision about what to catch and what to release.





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Deep Vision for marine research

No Catch – Just Data!

Dr. Huyngbeen Lee:
The biggest change is eco-friendly research that does not catch fish when operating trawling equipment.

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We have a database of millions of images of fish that we now use to train Deep Vision for the commercial fisheries.

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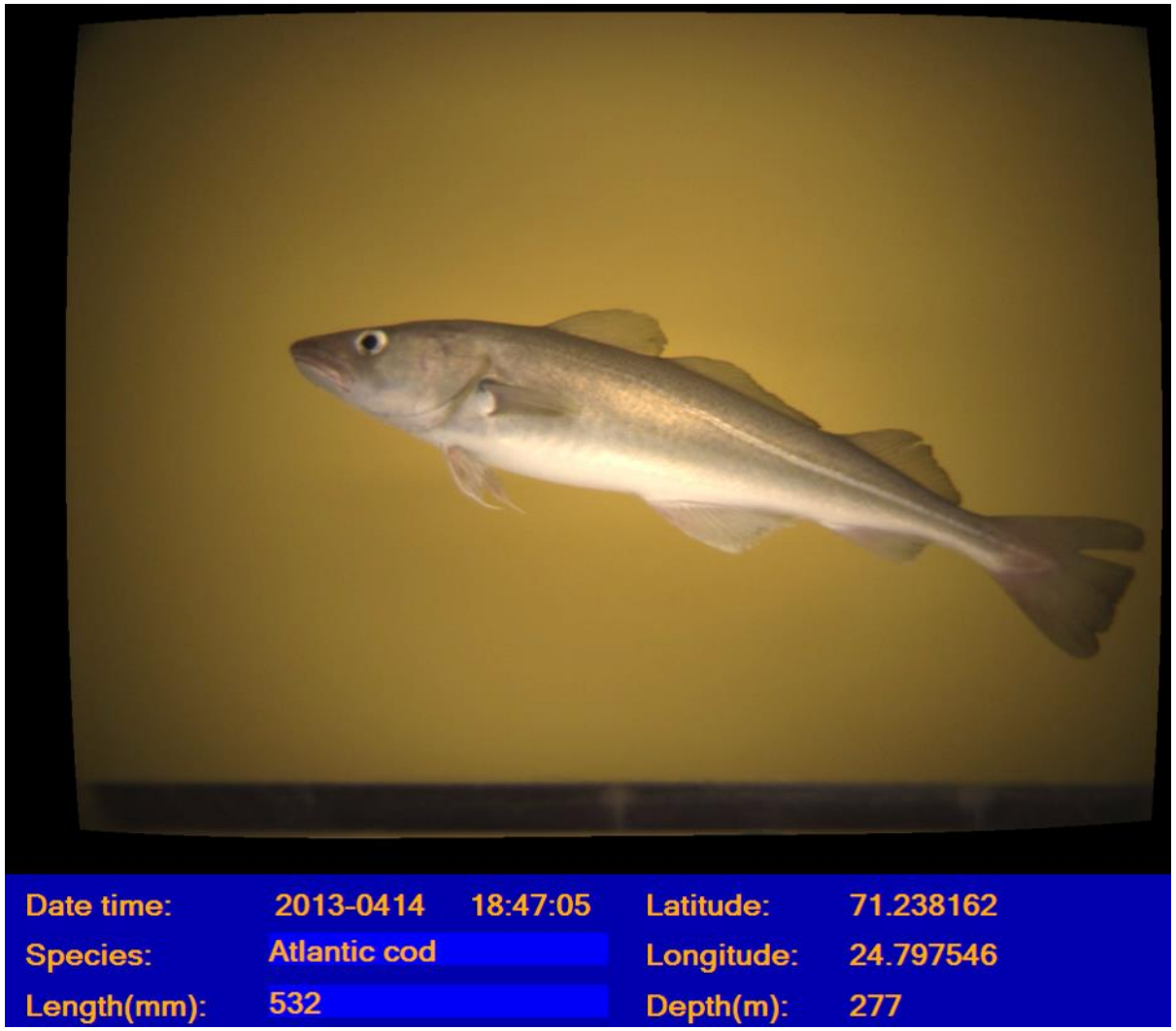
Cod



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Lumpsucker

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Shrimp

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Octopus

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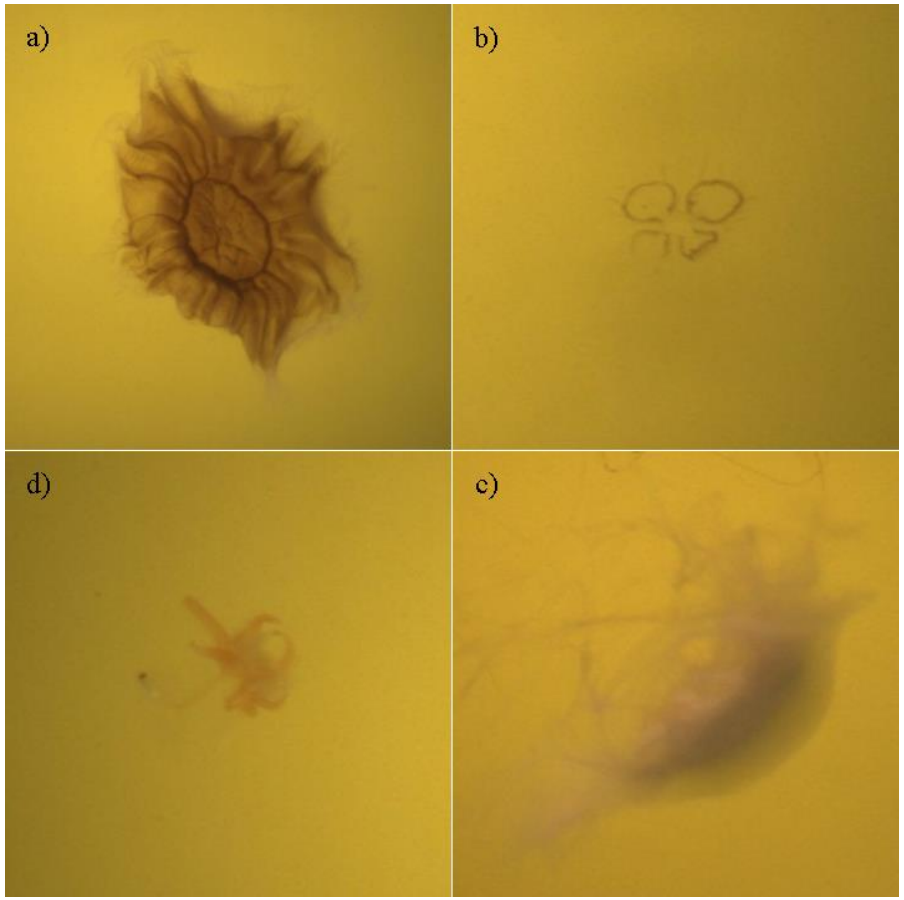
Jellyfish



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Juvenile fish

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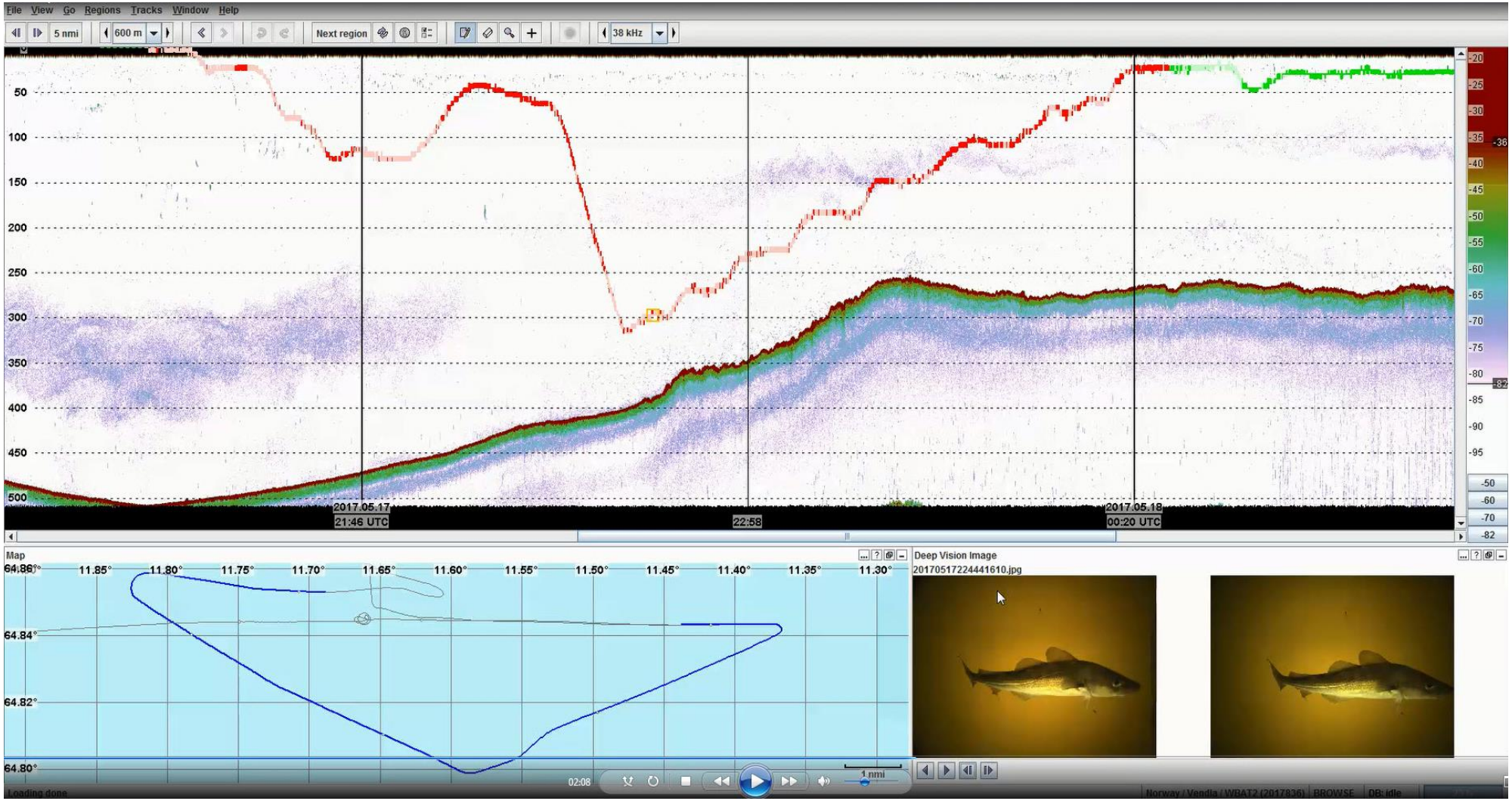
Deep Vision helps interpret acoustic data



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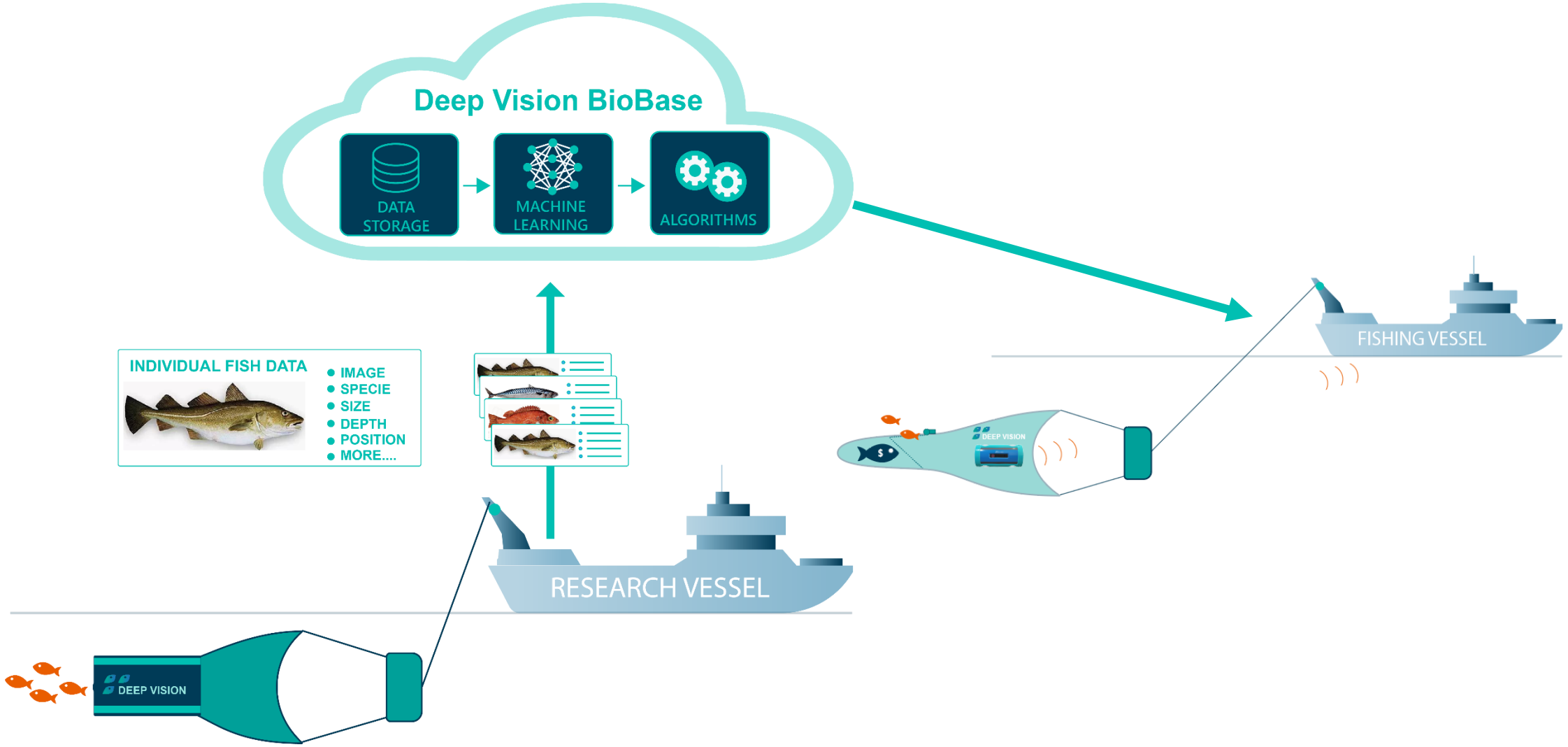
Deep Vision BioBase
DATA STORAGE
MACHINE LEARNING
ALGORITHMS
INDIVIDUAL FISH DATA
IMAGE
SPECIE
SIZE
DEPTH
POSITION
MORE....
FISHING VESSEL
RESEARCH VESSEL
DEEP VISION
DEEP VISION

DEEP VISION

Deep Vision for commercial fisheries

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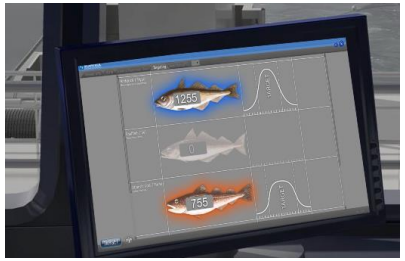
Developed in three stages

Stage 1: Deep Vision CatchView Sensor

- Image capture and offline analyses on board

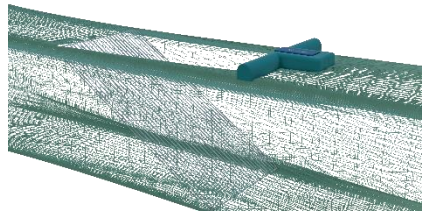
Stage 2: Deep Vision Live Catch Monitor

- Real time catch information on the bridge



Stage 3: Catch / Release

- Catch and release mechanism controlled from the vessel



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Deep Vision will make it possible to choose the species and size of fish so that we can:

- Fish more efficiently and reduce fuel consumption
- Catch only the fish that we need
- With the best possible quality
- To the best price for the fisherman
- Reduce bycatch
- Manage our fisheries resources more sustainably

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Questions?

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14 LIFE BELOW WATER

13 CLIMATE ACTION

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