

A tall, white lighthouse with a red band near the top stands on a dark, rocky cliff. The ocean is visible in the foreground with white foam from waves crashing against the shore. The sky is a deep blue with scattered white clouds. The text is overlaid on the left and center of the image.

The Coastal observatory Skagerrak - KOS

Instituttet of Marine Research

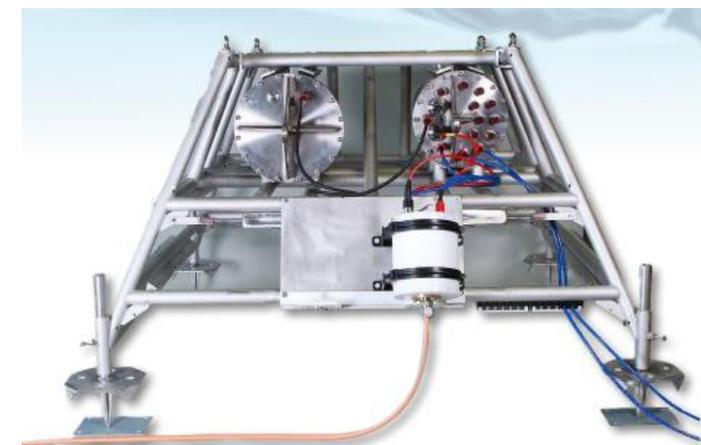
What is KOS

- Today IMR has a large activity in monitoring the coastal environment and marine resources.
- The CostWatch infrastructure initiative (IMR) – CoastWatch, which will develop and operate a network of small and large automated monitoring points along the coast based on new technology.
- KOS is one of four main stations within CoastWatch and will take the "pulse of the Skagerrak" (coastal Norwegian current).

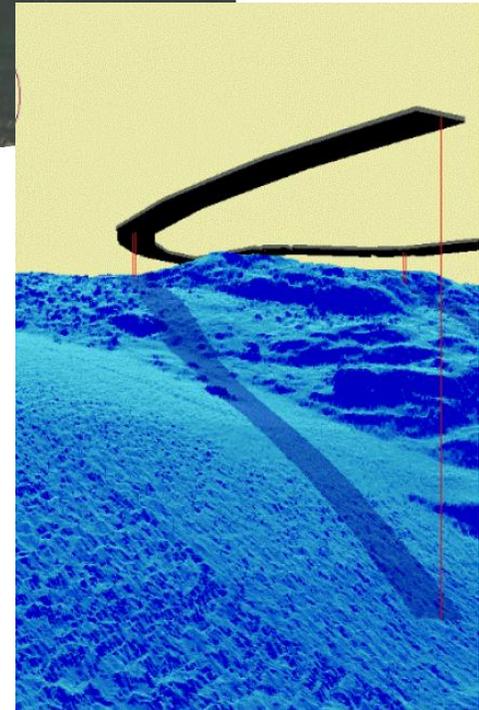
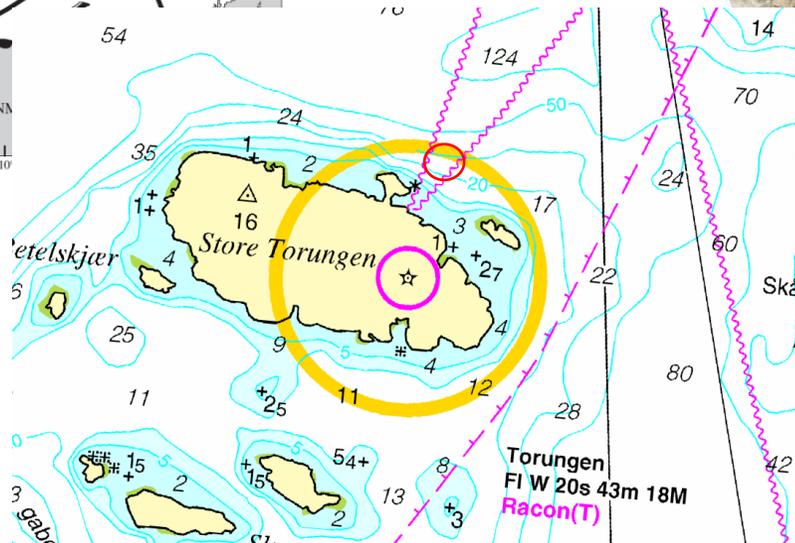
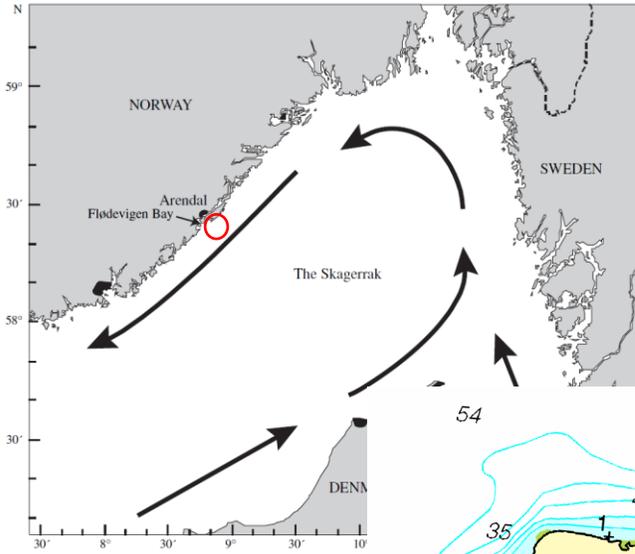


KOS etableres gjennom ulike faser

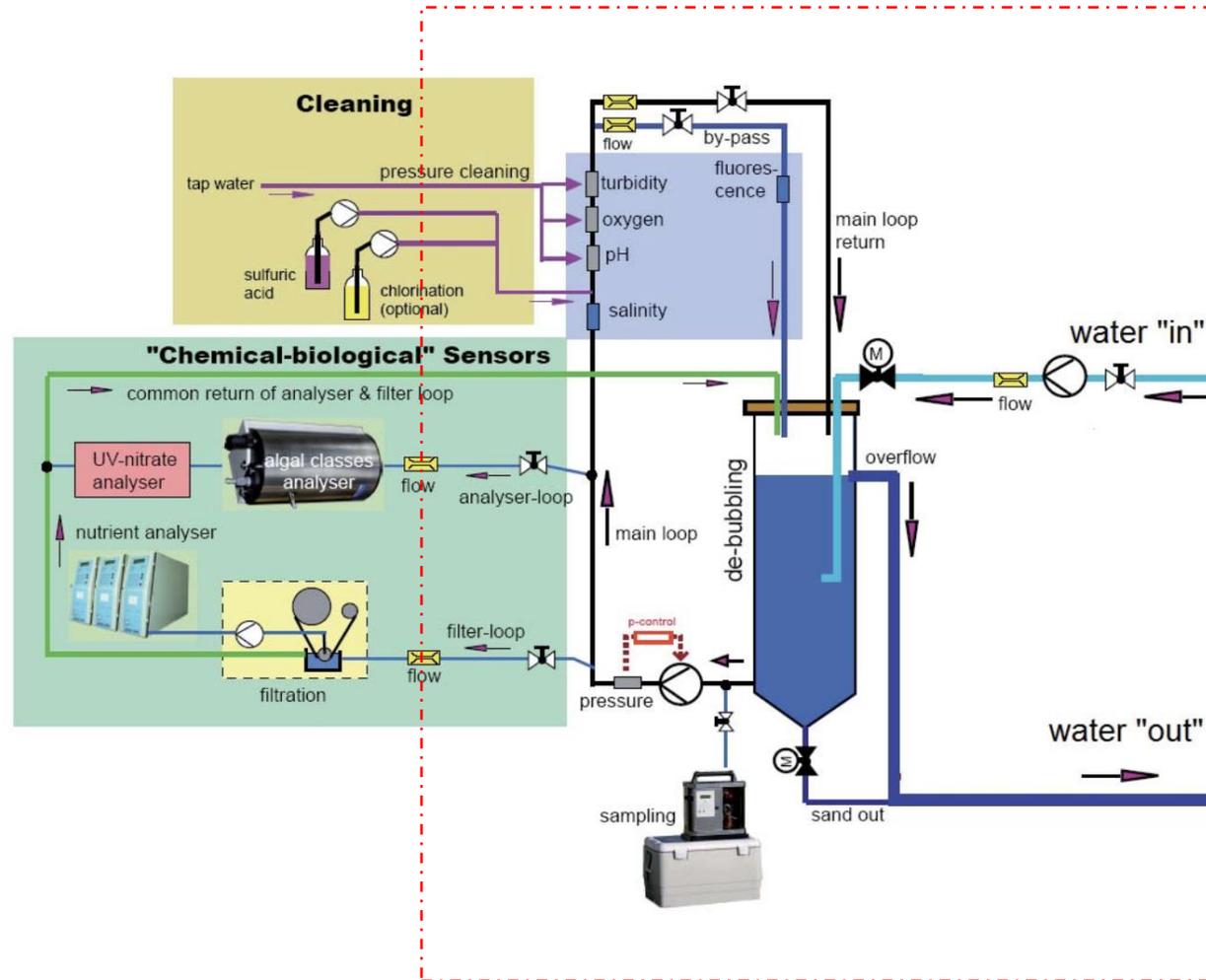
- Phase 1 (spring 2022)
 - Location
 - Establishment of "flow-through facilities" - FerryBoks on land
 - Basic sensor package 1, data communication, control unit
- Phase 2 (start 2023)
 - focus on obtaining biological data
 - Use of imaging systems
 - Focus on fish and benthic habitat
 - Sensor package 2



Location

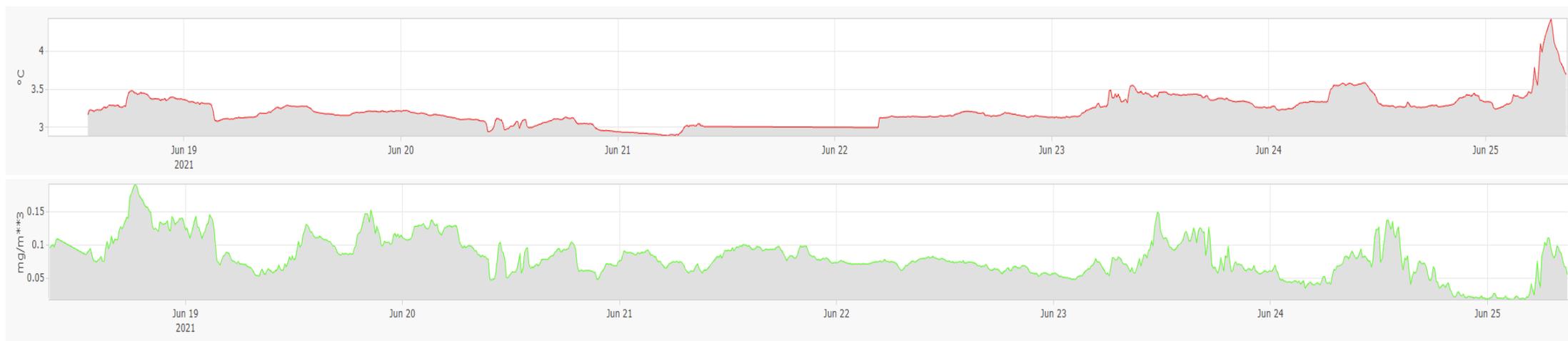


Phase 1: Installation of the «flow-through facilities» and basic sensors



Sensors - measurement parameter

- Temperature (P1)
- Salinity (P1)
- Chlorophyll (P1)
- Oxygen (P2)
- Turbidity (P1)
- cDOM (P1)
- Nutrients (P3)
- IFCB (phytoplankton species) (P2)
- WBAT (acoustic/fish) (P3)
- Currents (ADCP) (P3)



Temperatur (øvre) og Klorofyll (1 uke, Svalbard)

KOS phase 2

Coastal fish community

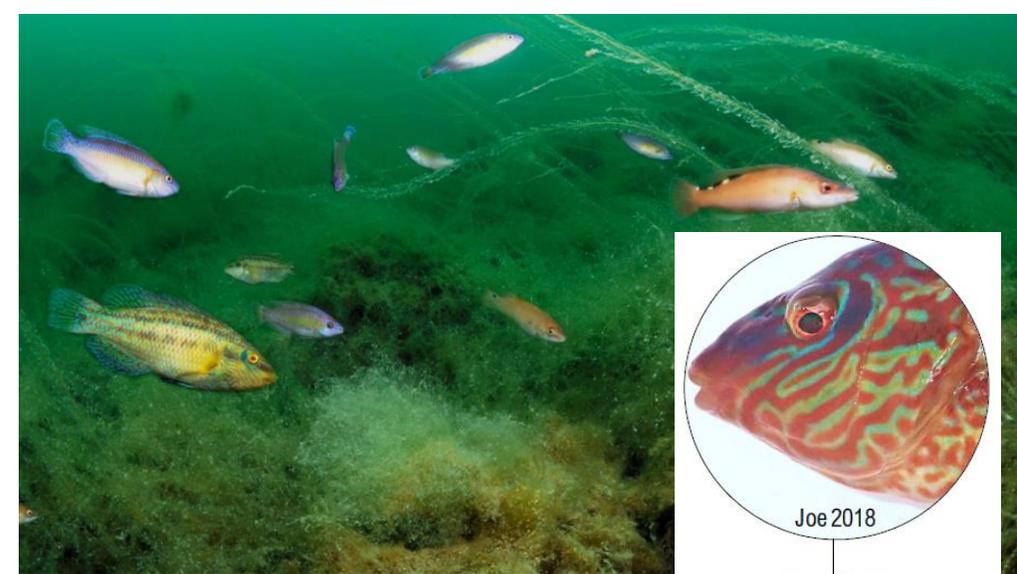
- Image systems (based on Coastvision)

Phytoplankton

- IFCB

Benthic habitat

- Focus on kelp community, along fixed video transects.



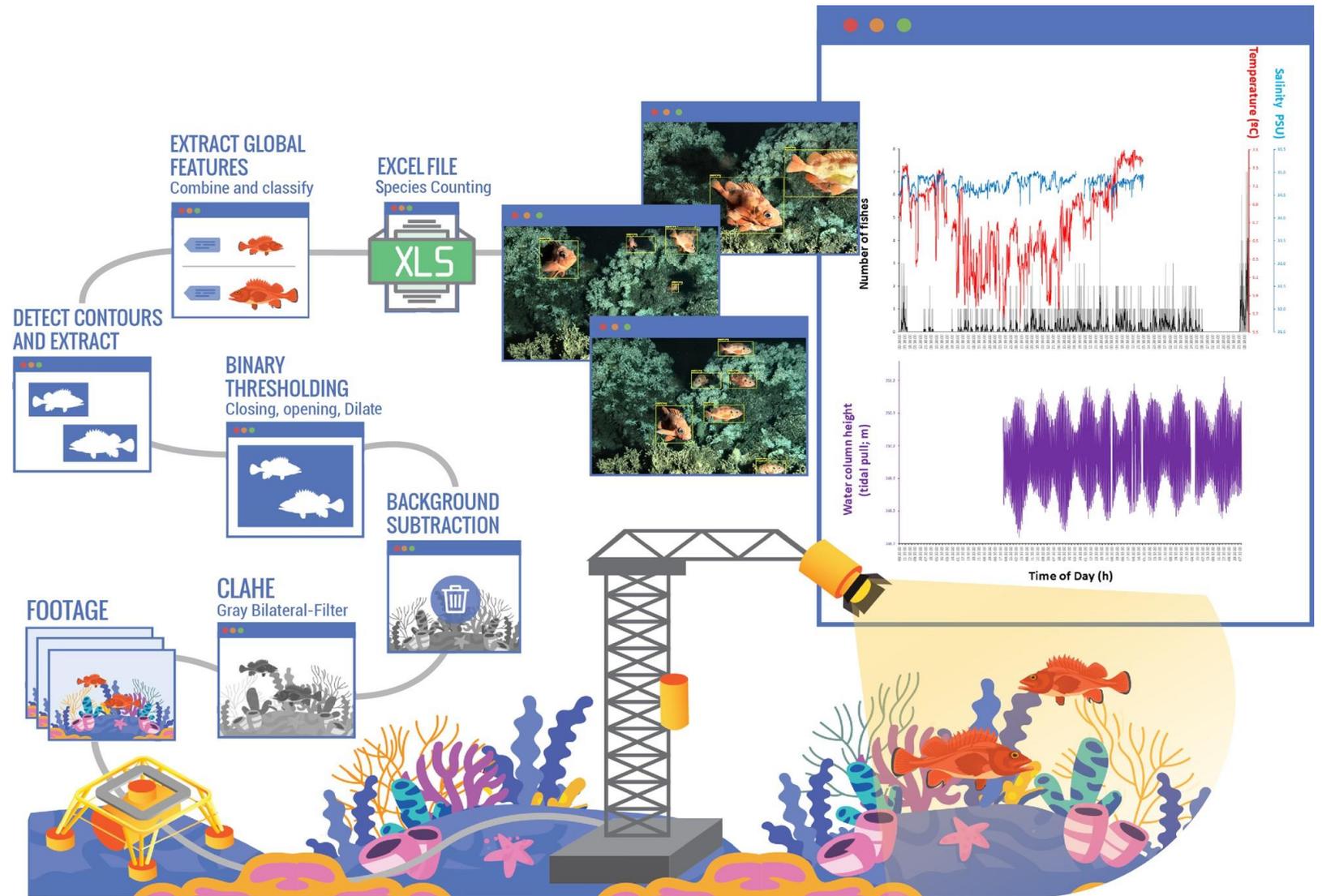


Figure 1. Pipeline for the automated rockfish tracking and counting at the LoVe ocean observatory ...



A revolution in observation technology - ready to go!

