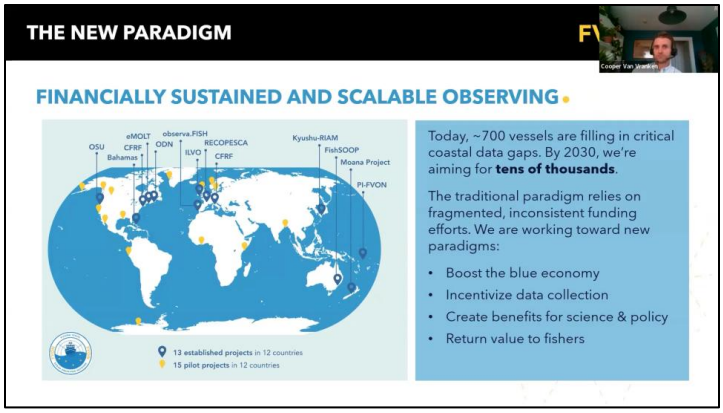
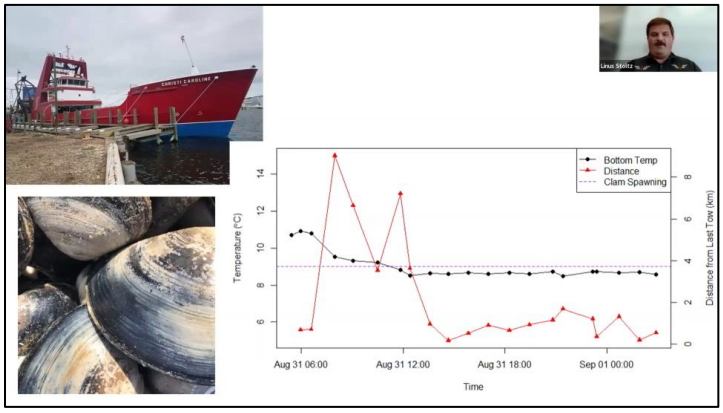
FVON UPDATES

OCTOBER 2025





UPCOMING EVENTS

Dialogues with Industry: Ocean Observing of the Future

- **29 October, 14:30-17:00 UTC:** Advancements in Sensors and Platforms, Reducing Costs, and Increasing Utility (REGISTER HERE)
- **19 November, 14:30-17:00 UTC:** Business Case and Market Maturity (REGISTER HERE)

Gulf and Caribbean Fisheries Institute (GCFI) 78:
27-31 October
Cartagena, Colombia
(REGISTER HERE)

Ocean Data for Sustainable & Profitable Fisheries, Part II:
9 December, 9:00 AEDT /
8 December, 22:00 UTC
(REGISTRATION COMING SOON)

OCEAN DATA FOR SUSTAINABLE & PROFITABLE FISHERIES

FVON's first ever webinar took place on 9 October 2025, drawing more than 80 participants from around the world. The event sparked lively engagement, with attendees posing dozens of questions about how fishers are collecting and using ocean data to improve their operations and contribute to sustainable ocean management.

Emma Heslop (UNESCO-IOC, GOOS) opened the session, emphasizing the critical role of ocean observing in supporting a sustainable and resilient blue economy and the importance of ensuring that data applications deliver tangible benefits to all ocean stakeholders. Presentations followed from Cooper Van Vranken and Linus Stoltz (standing in for George Maynard), who showcased two cornerstone FVON programs: eMOLT and ODN. Both speakers illustrated how fishers are not only collecting valuable environmental data but also using it to enhance their own livelihoods.

From improving fisheries stock assessments and optimizing clam harvesting to saving on fuel and enhancing purse seine efficiency, the examples demonstrated how data-driven tools can make fishing operations both more profitable and sustainable.

This inaugural webinar marks an exciting step forward for FVON as it builds global connections across the fishing, research, and policy communities, showing how fishers' participation in ocean observing creates both local and global benefits.

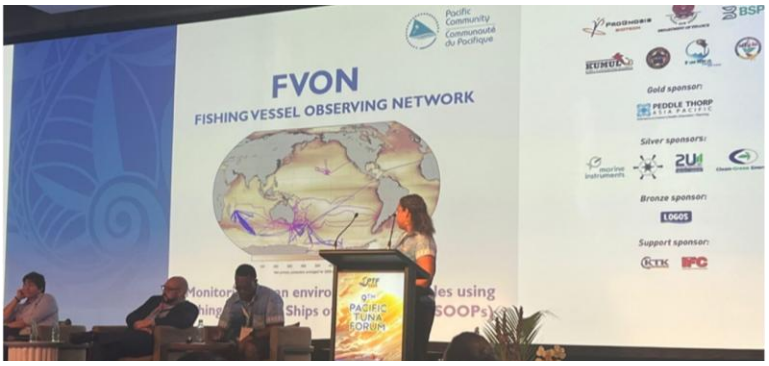
If you missed it, be sure to watch the recording on YouTube and join the Ocean Observing space on SAFET to discuss topics and follow-up questions from the webinar. See you in December for Part II!

SUPPORTING HURRICANE READINESS IN THE BAHAMAS

In September, Environmental Defense Fund (EDF) held a workshop at the University of The Bahamas to review the one-year outcomes of the FVON-Bahamas pilot while advancing a roadmap for the next year of operation. The pilot has already gathered more than 4,600 water column profiles, and the team plans to outfit sensors on a dozen more vessels throughout the region.

Participants discussed how to better enhance hurricane preparedness, build out national research capacity, and position The Bahamas as a regional leader in ocean observing. The workshop produced a roadmap (available on our website) for expanding the network, securing sustainable funding, and ensuring that Bahamian data continues to support both local resilience and global climate readiness.

Students, government representatives, fishers, and other stakeholders at the FVON-Bahamas workshop. (Credit: Leslie Von Pless, EDF)



Cynthia Wickham (SPC) presenting at the Pacific Tuna Industry Forum in Nadi Fiji. (Credit: Martin Chong)

PI-FVON IN FULL FORCE ACROSS THE SOLOMON ISLANDS, FIJI, SAMOA, & FRENCH POLYNESIA

Cynthia Wickham (Pacific Community, SPC) represented the Pacific Islands (PI) FVON network at the Pacific Islands Ocean Conference held in Honiara in the Solomon Islands and the Pacific Tuna Industry Forum in Fiji. Cynthia's presentations helped showcase the growing impact and reach of the PI-FVON program and allowed for exciting cross-industry connection and discussion.

The first sensor installation in Samoa marks an exciting milestone for PI-FVON, as well as the addition of five new vessels fishing for ocean data across French Polynesia. These vessels join 18 others in Fiji, Papua New Guinea, and the Solomon Islands. The data will have far-reaching benefits for climate resilience across Pacific Island communities.

The new installations were made possible through the leadership and support of Cynthia Wickham, Lui Bell, and the SPC team in country. PI-FVON is made possible through a collaboration between SPC and IMOS-FishSOOP.

Left: Installing a Moana deck unit on a fishing vessel in Samoa. (Credit: SPC). Right: PI-FVON booth at the Pacific Islands Ocean Conference in Honiara. (Credit: Cynthia Wickham)

French Polynesian installation team aboard one of the new vessels that has joined the program. (Credit: Lui Bell)

BREAKING ICE IN ALASKA

Jack Carroll (ODN) installed the first vessels of a new FVON network in Dutch Harbor, Alaska: *Oceanography on Deck*, which aims to provide consistent coverage of the Bering Sea. Different fleets have different seasonal openings, necessitating a collaboration across a wide range of fleets including pelagic trawlers, bottom trawlers, long liners, and the legendary crab fleet featured in the *Deadliest Catch* TV show.

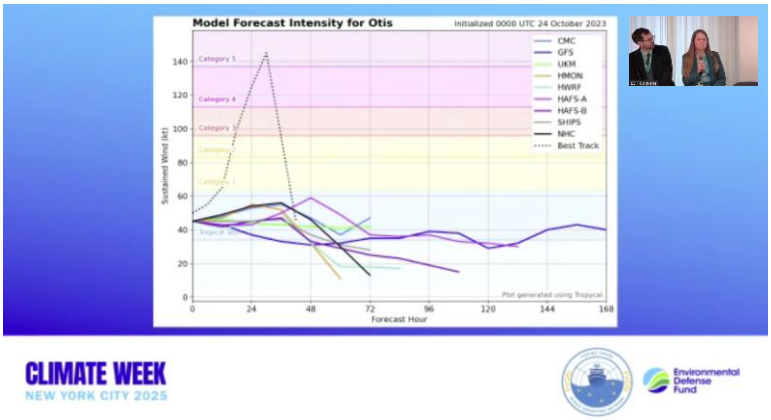
The collapse of the iconic Bering Sea King Crab fishery in 2022 due at least partially to a heatwave was the impetus for this project. The crab collapse was disastrous not just for the crab fleet, but also for creating tension between other fleets who have limited crab bycatch quota. Follow along on Instagram or LinkedIn!

This project is led by Ocean Data Network, Alaska Marine Conservation Council, and Alaska Bering Sea Crabbers. Big thanks to the North Pacific Research Board for funding the initial three years of this network!

A fishing vessel navigating ice in the Bering Sea. (Credit: Cory Lescher)

OCEAN DATA AT CLIMATE WEEK NYC

At Climate Week in New York City, Kate Bonzon (Vice President of Climate Resilient Fisheries and Oceans, EDF) underscored the importance of ocean data for addressing the climate crisis. Using Hurricane Otis as an example, she discussed how data improves forecasts for devastating rapid intensification events. Yet on average, we only collect one data point for every 17,000 square miles — about the size of New Jersey. FVON is working on changing that. In doing so, we can strengthen our understanding of the ocean and build a more climate-resilient future.



Kate Bonzon (EDF) presenting on FVON and the importance of ocean data at Climate Week NYC 2025.

DATA IN ACTION

Using FishSOOP observations from the East Australian Current (EAC) region, Phellipe Pereira Couto (UNSW) evaluated how accurately global ocean forecast models capture subsurface temperature structure. Drawing on data from Moana sensors deployed between January and June 2025 —

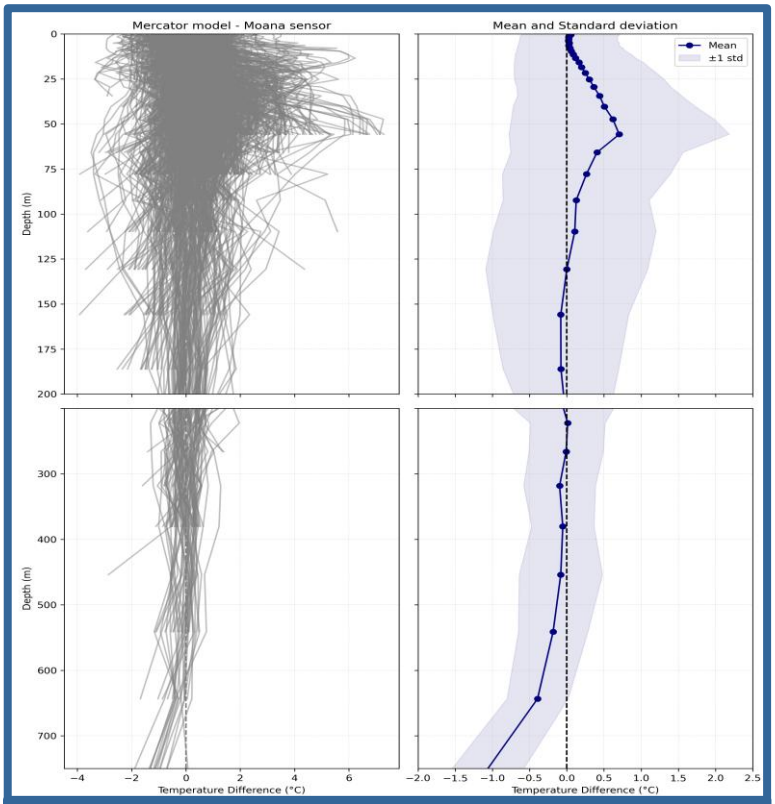


Figure 1: The absolute temperature differences (left) and mean and standard deviation (right) between modelled subsurface ocean temperatures and observed FishSOOP measurements (0 - 700 m depth). (Credit: Phellipe Pereira Couto, UNSW)

a total of 1,598 profiles — he compared these in situ measurements with forecasts from the Operational Mercator Global Ocean Analysis and Forecast System. While surface temperatures aligned closely with satellite data, large discrepancies of up to 6 °C emerged below the surface, particularly within the mixed layer and thermocline (25-75 m), where models often predicted warmer conditions than observed (see Figure 1).

Such gaps highlight the limitations of global models in dynamic boundary-current regions like the EAC and underscore the need for more subsurface observations and higher-resolution coastal modeling. These improvements would help both scientists and fishers better understand ocean circulation, heat content, and productivity.

Data sourced from Australia's Integrated Marine Observing System (IMOS) – enabled by NCRIS and operated by a consortium led by the University of Tasmania. Find the data on AODN. These updates were originally published in the IMOS-FishSOOP newsletter. Subscribe and read more on the website.

QUICK STATS

Since the beginning of 2025, FVON has been documenting metrics (shown in Table 1) from three of its affiliate networks: the environmental Monitoring on Lobster Traps and Large Trawlers Program (eMOLT), Ocean Data Network (ODN), and the Smart Fisheries Network (SFiN).

METRIC	eMOLT	ODN	SFiN
Number of Tows	16102	2092	2191
Number of Tows to GTS	5248	1819	0
Vessels	130	23	223
Vessels with WMO ID	63	21	0
Min/Max Pressure	4.1 / 373.0 dbar	1.8 / 858.8 dbar	0.0 / 499.9 dbar
Min/Max Temperature	-0.5 / 28.7 °C	0.2 / 19.7 °C	0.6 / 31.7 °C
New Vessels	86	18	0

Table 1: Statistics from eMOLT, ODN, and SFiN between 1 January 2025 and 21 October 2025. Thanks to Carles Castro Muniain and ODN for setting up automatic metrics.

Together, these programs have contributed **20,385 total tows** from **376 vessels** since 1 January 2025. Thank you to George Maynard, Cooper Van Vranken, Jack Carroll, Carles Castro Muniain, Shin Kida, Nick Hirose, and the many program participants for your contributions to ocean science!

WORKSHOPS & EVENTS

OCEANS CONFERENCE AND EXPOSITION

29 September – 2 October 2025 | Chicago, USA
Star-Oddi showcased its full line of miniature multi-sensor data loggers and online sensors for ocean monitoring and subsea gear research, along with the larger data loggers in the Starmon series.

FUTURINNOV HORIZON SCANNING WORKSHOP

12 November 2025
Michela Martinelli (CNR) and Patrick Gorringe (SMHI) have been invited to join the European Innovation Council and Joint Research Centre's Horizon Scanning Workshop on emerging technologies and breakthrough innovations in ocean observing. They'll be highlighting FVON as an example of innovation at the intersection of fisheries and ocean data. Read previous FUTURINNOV reports at this link.

NORTHEAST COOPERATIVE RESEARCH SUMMIT

26 February 2026 | Riverhead, NY, USA
Registration is open until 7 November for the 2026 Northeast Cooperative Research Summit. Consider attending, participating in breakout discussions and the research prioritization exercise, or contributing a presentation.

OCEAN SCIENCES MEETING

22-27 February 2026 | Glasgow, UK
FVON will be chairing a poster session at OSM26 and hosting a side event with an opportunity to meet other members of the FVON community. Be sure to register and arrange for travel and accommodations as soon as possible to take advantage of this opportunity!

ICES ANNUAL SCIENCE CONFERENCE

15-18 September 2026 | Brest, France
FVON will convene a theme session titled "Building Partnerships for Novel Oceanographic and Fisheries-Dependent Data" at the ICES Annual Science Conference 2026. Topics will include the state of the art in fishing vessel-based observing systems, sensor technologies for gears and vessels, applications of these data, and data management for interoperability. A keynote presentation will open the session, followed by oral and poster contributions and a closing discussion on building cross-sector collaboration in the ocean observing community.

CALLS FOR EXPERTS

OCEAN OBSERVATIONS PHYSICS AND CLIMATE PANEL

The OOPC is seeking new experts to assess and improve the Global Ocean Observing System (GOOS). Applications must include a CV and statement of interest and are due **10 November 2025** to bmartinmiguez@wmo.int.

EUROGOOS SCIENCE OFFICER

EuroGOOS is hiring a Science Officer to coordinate projects, support the EuroGOOS 2030 Strategy, and foster international collaboration. Apply by **20 November 2025** to dina.eparkhina@eurogoos.eu.

A FISHERMAN'S GUIDE TO MARINE CARBON DIOXIDE REMOVAL

The Ocean Sciences Division is seeking feedback on its latest initiative to connect fishers and coastal communities with marine carbon dioxide removal research. Read more at the EGU Ocean Sciences Blog.

DIVE A LITTLE DEEPER

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FVON FISHING VESSEL OCEAN OBSERVING NETWORK

Want to contribute? Submit anonymous feedback or newsletter updates.