

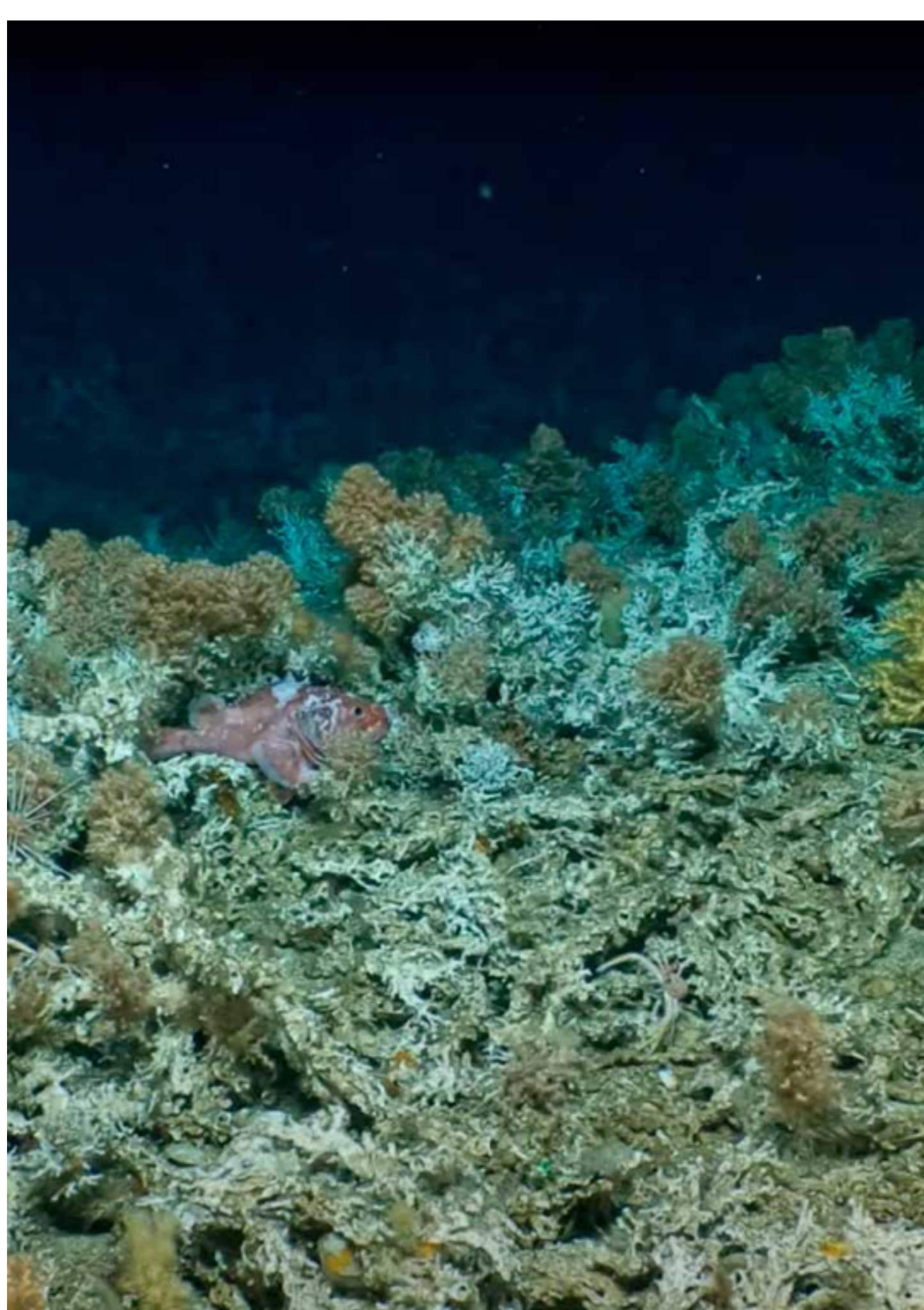
Summer 2023

We at the National Deep Submergence Facility are saddened by the loss of the *Titan* submersible. Our thoughts go out to the family, friends, and the entire deep-submergence community affected by this tragic outcome. We also join in mourning those lost on board *Titan*.

The tight-knit nature of the maritime community was evident in the overwhelming outpouring of support and offers of assistance that came from around the world when news of their disappearance first emerged. WHOI and NDSF remain committed to providing any assistance authorities may request and to maintaining a high level of safety and reliability across all of our underwater platforms

Anyone interested in learning more about bringing *Alvin* back online after its most recent upgrade can read "[Who is Alvin and what are Sea Trials](#)" from *Oceanus* magazine. If you want to learn more about the certification process *Alvin* goes through, read "[It's Official](#)" from the NDSF sea trials blog.

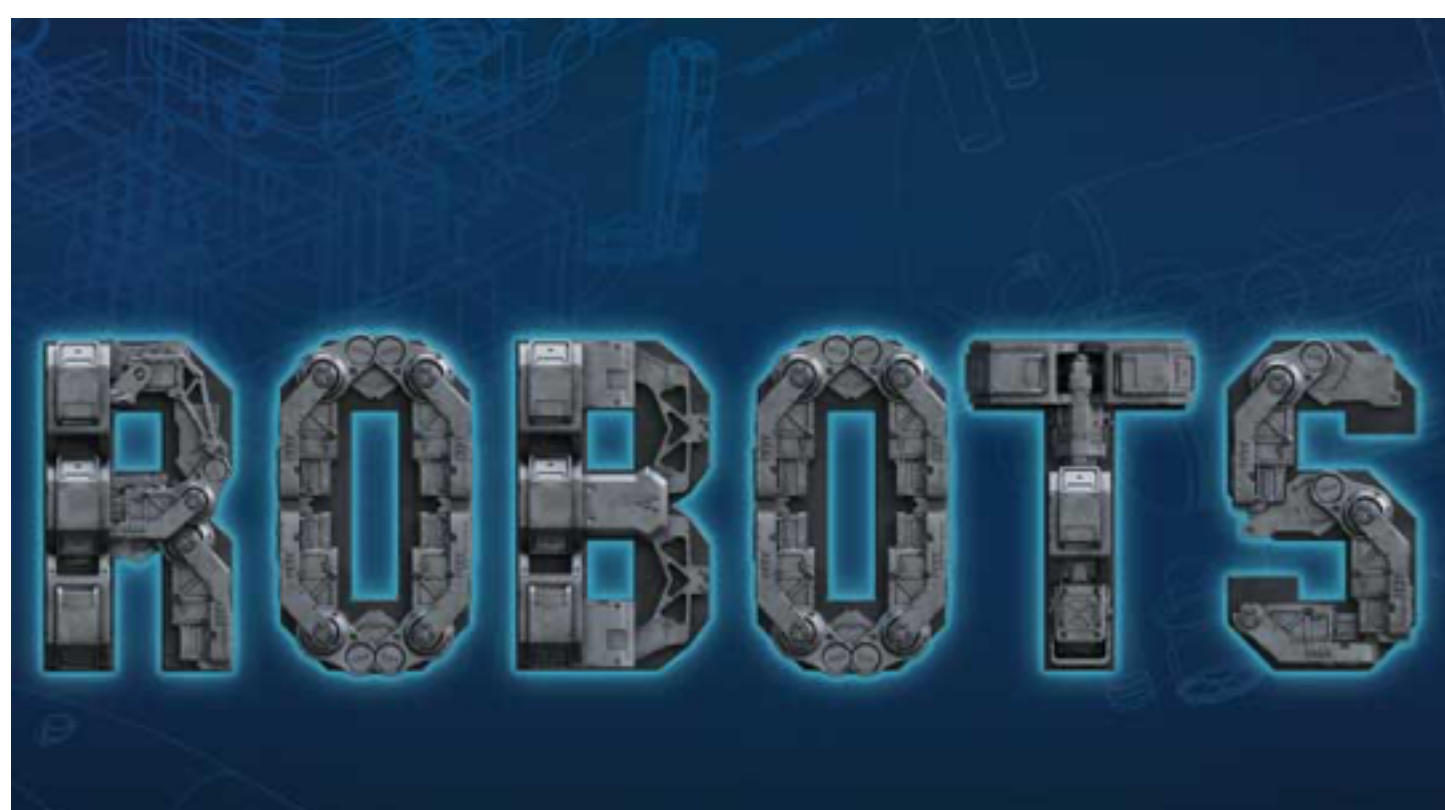
Pristine deep-sea coral reefs discovered during an *Alvin* dive



(©Woods Hole Oceanographic Institution)

Scientists using HOV *Alvin* aboard R/V *Atlantis* discovered **pristine deep-sea coral reefs in the Galápagos Marine Reserve**. The extensive, ancient deep-sea coral reefs are the first of their kind ever to be documented inside the marine protected area since it was established in 1998. The reef, found at 400-600 meters (1,310-1,970 feet) depth at the summit of a previously unmapped seamount in the central part of the archipelago, supports a breathtaking mix of deep marine life. [Read the press release](#).

Around the facility



Jason Engineer Mario Fernandez featured on Ocean Encounters

How ocean robots are revolutionizing science at sea



Hardwired to love: our emotional connection to robots

Sentry Engineer Justin Fujii and WHOI Mechanical Engineer Kaitlin Tradd on the submersibles they know best



Before *Sentry* there was ABE

The OG autonomous seafloor robot

News and events

Welcome summer NDSF interns

This season we're welcoming interns through the [UNOLS MATE](#) program, the [NOAA Ocean Exploration Cooperative Institute \(OECI\)](#), and a WHOI-based [Blue Economy internship](#) for Cape Cod Community College students.

- **Mija Wheeler**, MATE intern, studying computer engineering at Kapi'olani Community College, will work with the **Alvin Team**
- **Adam Esminger**, MATE intern, studying computer engineering at West Virginia University, and **Sarah Sergent**, MATE intern, studying marine technology at Northwestern Michigan College, will work with the **Jason Team**
- **Patrick Bent**, Blue Economy intern, studying mechanical engineering, at Cape Cod Community College; and **Haley Holcomb**, MATE intern, studying mechanical engineering at University of California Santa Barbara, will work with the **Sentry Team**
- **Kimberly Henderson**, OECI intern, studying animal science at Tuskegee University, will work with **WHOI scientist Annette Govindarajan**.

DeSSC new users at WHOI



The Deep Submergence Science Committee (DeSSC) hosted an in-person workshop at Woods Hole Oceanographic Institution this spring, for a cohort of potential vehicle users, hailing from 11 institutions. DeSSC is a UNOLS committee of scientists who support and advise the operators and funding agencies of the NDSF. The workshop was an opportunity for early-career scientists to hear from experienced deep-sea scientists, NDSF operators, and gain insight into deep-sea research, grant-writing, technology, and data management. **If you're interested in deep-sea research with our vehicles, sign up for updates about the New User program [here](#).**

Sea Stories

OREGON PUBLIC BROADCASTING Deep-sea volcano off the Oregon Coast helps scientists forecast eruptions



Reporter Jes Burns takes a deep dive into monitoring and developing activity at Axial Seamount—using ROV *Jason*—and unveiling future volcanic predictions. Don't miss the [sea shanty](#) in this video version.

EOS

Observing a Seismic Cycle at Sea

Hear from scientists using AUV *Sentry* to document the buildup of stress leading to a large earthquake on a seafloor fault. In a recently published EOS article they discuss the scientific progress made across three expeditions and new innovations in remote presence.