

UNIVERSITY OF HAWAI'I'S

ROV LU'UKAI

DeSSC • 2021 - 2022

2021 EXPEDITIONS

ACO

PI: Bruce Howe



3 Dives: 64 hours submerged

- Deployed and connected Basic Sensor Package 5 and CAM2
- Placed **Fred Duennebier memorial**
- Recovered LIGHT1, LIGHT4 and 4 hose reels
- Performed housekeeping

KAIWI CHANNEL

PI: Brian Taylor

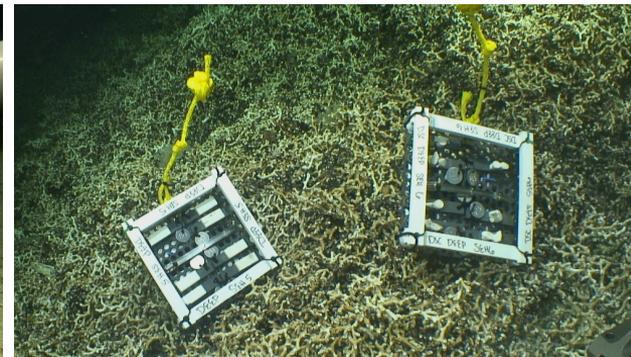


6 Dives: 52 hours submerged

- Collected **41 samples** of paleolithic coral and manganese coated basalt rock
- Surveyed the Kaiwi shelf to better understand the complex geologic history

DEFYING DISSOLUTION

PI: Amy Baco-Taylor



31 Dives: 240 hours submerged

- Visited 9 seamounts
- **4 lander deployments** and placed **18 dissolution block experiments**
- Collected **over 166 coral and water samples** by ROV
- Surveyed high density deep scleractinian coral reefs

EDUCATION & OUTREACH

Hawaii Sea Grant Voice of the Sea:

- ALOHA Cabled Observatory production premiered Aug. 5th, 2021
- Virtually Exploring the Abyssal Plains won the Bronze Telly Award for remote production!

Provided mentoring and education opportunities:

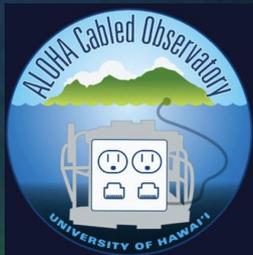
- Real-time video interaction with Research Experience for Undergraduates students on shore
- Onboard student liaison, Samantha Hanson

Community engagement through Social media:

- Over 1000 people like or follow on Facebook
- Over 735 followers on Instagram
- 260 followers on Twitter
- Average 300-400 accounts reached per post



2022 EXPEDITIONS & UPGRADES



Connect
new and
recover old
instruments
to service
the ACO

What's New?

5 computers and
upgrades to **GreenSea**
ROV software

Logging and reporting
system through
SeaLog

SeaLog for ROV Lu'uukai

ALL NAV ROV SCIENCE VIDEO

BEACON TRACKING

CURRENT

DATA CAPTURE TEST

DEBRIS

DEPTH

HAZARD

INS RESET

SHIP MOVE

SHIP STOP

VIDEO LOGGING

WAYPOINT

WEATHER

Type new event

Submit

2022-01-24T01:17:21.483Z <mputts> TESTING



ROV HD



ROV Quad

Vehicle Realtime C T D Data

Conductivity: 5.259 S/ml
Temperature: 24.7862 C
Depth: 2.71 m

Vehicle Realtime Nav Data

Latitude: 21.315693 ddeg
Longitude: -157.877196 ddeg
Heading: 78.083 deg
Depth: 10.56 m
Altitude: 5.5 m

