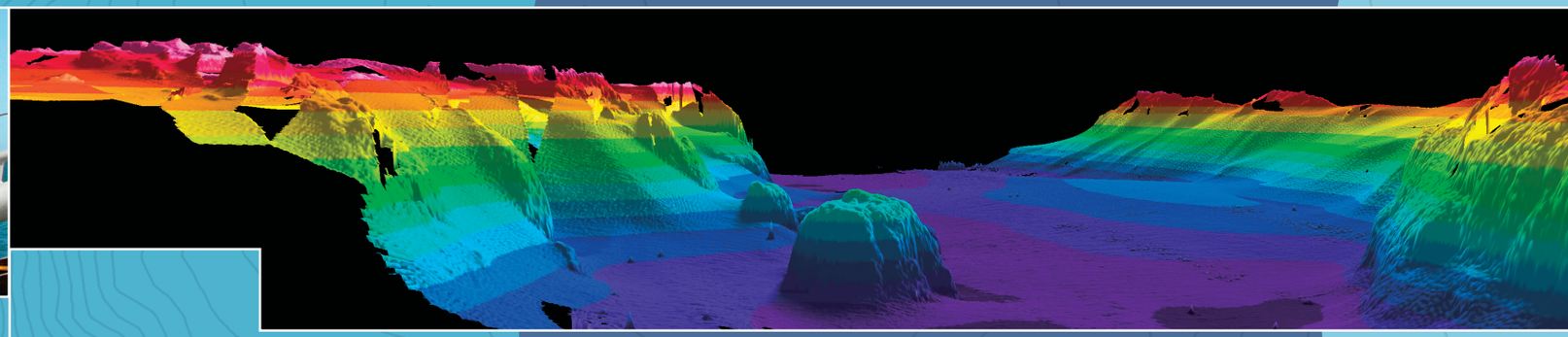


SFML - Seafloor Mapping Lab

Your seafloor mapping of the MPAs has been a huge help to us both in designing the surveys and in planning and executing the dives. The location and depths of the rock features in your maps have been dead-on! I only wish we had this resolution of data for all the MPAs! Thank you and your entire team very much.

Mary Yoklavich, Research Fishery Biologist
NOAA Fisheries

The Seafloor Mapping Lab has provided the MATE Center with extensive bathymetric data sets that are unparalleled in their quality, descriptive metadata, and ease of access through a well-organized website. We have used these data sets extensively in our classroom teaching, our college faculty workshops, and in our marine GIS workshops for resource managers.

Deidre Sullivan, Director
Marine Advanced Technology Education (MATE) Center
Monterey Peninsula College

The Seafloor Mapping Lab produces excellent quality data that are vitally important to many of the projects that support California's Marine Life Management Act and Marine Life Protection Act.

Paulo Serpa, GIS Analyst
California Department of Fish and Game

Studies of seafloor habitat, coastal sedimentology, and geologic hazards have benefited greatly from high quality seafloor data collected by the Seafloor Mapping Lab in central and southern California.

Guy R. Cochrane, United States Geological Survey
Pacific Science Center

Habitat maps provided to our program by the Seafloor Mapping Lab allow us to identify key relationships between individual fishes, invertebrates, and algae and their environment. As a member of the Science Advisory Team to California's Marine Life Protection Act, these maps are invaluable to scientists and others in the location and design of marine protected areas.

Mark Carr, Ph.D., Research Faculty/PISCO PI
University of California, Santa Cruz

SEAFLOOR MAPPING LAB
CSUMB Division of Science
and Environmental Policy
100 Campus Center
Seaside, CA 93955
seafloor.csumb.edu

Rikk Kvitek, Ph.D., Director
rikk_kvitek@csumb.edu
831-582-3529

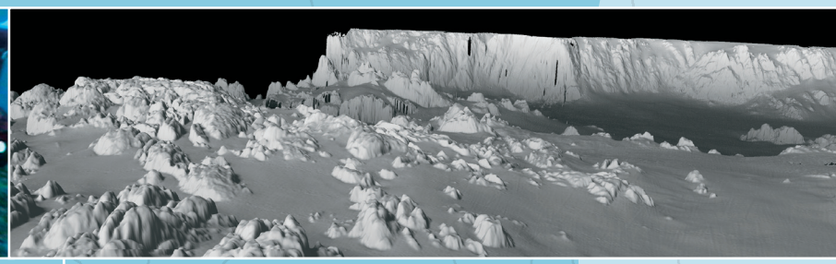
DIVISION OF SCIENCE
AND ENVIRONMENTAL POLICY
CSUMB.EDU/sep

CALIFORNIA STATE UNIVERSITY, MONTEREY BAY
CSUMB.EDU

Seafloor Mapping Lab

Supporting marine stewardship through science, technology, and education

California State University
Monterey Bay



The Seafloor Mapping Lab specializes in high-resolution acoustic remote sensing for coastal habitats. Combining research and education with state-of-the-art geospatial technology, the Seafloor Mapping Lab offers unique hands-on, field-to-finish experience to students while conducting professional habitat mapping surveys for resource management and basic research along the continental margins.

CAPABILITIES

HYDROGRAPHIC SURVEY VESSEL

The R/V VenTresca, a custom built, shallow draft, 35 ft. aluminum hydrographic survey catamaran.

MULTIBEAM BATHYMETRY

Contour and sub-meter 3D relief mapping.

SIDESCAN SONAR

Digital mosaics and substrate classification from acoustic backscatter.

SUB-BOTTOM PROFILING

Full spectrum sub-bottom chirp profiling for determination of seafloor sediment layer thickness.

REMOTELY OPERATED VEHICLE

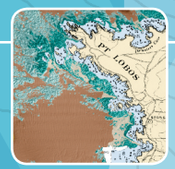
Georeferenced and quantitative video mapping of seafloor habitats and communities.

GIS ANALYSIS AND CHANGE DETECTION

An advanced suite of GIS products based on our high-resolution bathymetric data, including quantitative, repeatable methodologies for habitat classification, 3D rendering, landscape change detection, and GIS/video data fusion.

DATA LIBRARY

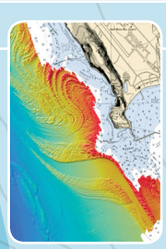
Access to Seafloor Mapping Lab data products with full FGDC Metadata via an online data portal. Data organized by survey location/ project and data type.



PROJECTS

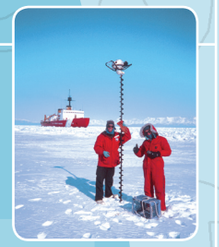
WEST COAST HABITAT MAPPING

The Seafloor Mapping Lab has mapped over 3,000 square kilometers of West Coast marine habitat for numerous state and federal resource management agencies, providing high-resolution multibeam and sidescan sonar habitat maps for critical fisheries and marine management areas along the California coast. Sponsors and partnerships include the California Ocean Protection Council, California Department of Fish and Game, National Underwater Research Program, United States Geological Survey, National Marine Fisheries Service, National Marine Sanctuary Program, U.S. Army Corps of Engineers, and State Coastal Conservancy.



SEAFLOOR MAPPING IN POLAR ENVIRONMENTS

Funded through the National Science Foundation, NOAA National Underwater Research Program, and National Geographic Society, the Seafloor Mapping Lab mapped and created the first GIS for anthropogenic debris and marine habitats at McMurdo Station, Antarctica, and quantified the ecological effects of ice scour disturbance in the Canadian Arctic and Ross Sea, Antarctica.



INDUSTRY SPONSORS

The Seafloor Mapping Lab has developed educational partnerships with key industry leaders including CARIS; Hypack, Inc.; IVS Incorporated; Trimble Navigation; Triton Imaging, Inc.; and Fugro Pelagos, Inc.

SEAFLOOR MAPPING LAB
CSU MONTEREY BAY