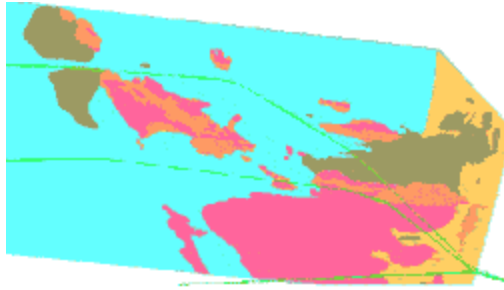


## Habitats, Geohazards, and the Internet

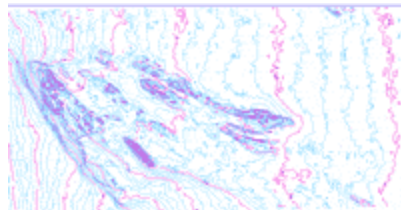
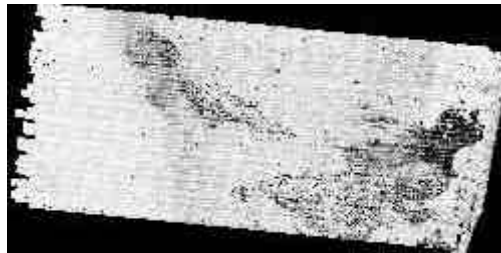
H. Gary Greene - Moss Landing Marine Labs  
Dallas Meggitt - Natural Resources Consultants  
Norman Maher - Monterey Bay Aquarium Research Institute  
Edward J. Saade - Racal Pelagos, Inc  
Clive Moody - Racal Pelagos Inc.

The worldwide explosion of oceanic fiber-optic telecommunications cables for rapid data transfer capabilities has created a demand by industry and governments alike to know more about the seafloor. Before cables were laid in straight lines across a variety of seafloor habitats.



After - concerns about potential impacts to habitats led to detailed seafloor imagery that is used to determine buriable routes that are secure and avoid critical fisheries and biological habitats

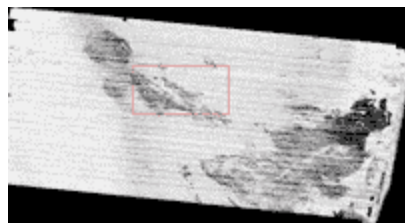
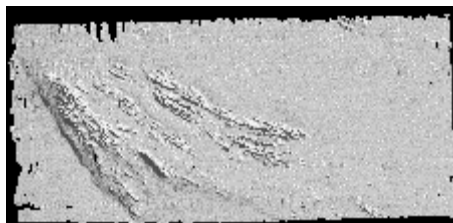
Sidescan sonar (ORE 100 KHz) data collected to assess safe and secure cable routes that avoid rocky habitats and active tectonic and seafloor sedimentary processes.



Detailed multibeam bathymetric map contoured at 1m intervals

(see poster by Saade et al.)

A shaded relief image of multibeam bathymetry produced to characterize a critical rockfish habitat (see poster by Saade et al.).



Seafloor hazards map showing fault traces and associated deformation in the Estero/Morro bays region

Because fiber-optic cables are important vehicles for the rapid transfer of data around the world, it would be beneficial for SOPAC Member countries to consider offshore business potentials that are Internet based. However, proper planning and assessment of any cable routes to island nations should result in data collection that can be of multiple use to improve SOPAC's understanding of natural resources and geohazards.