

DISCUSSION

The California Continental Borderland is the complex continental margin in southern California that extends from Point Conception southward into northern Baja California (Fisher and others, 2009). This colored shaded-relief bathymetry map of the northern continental borderland in southern California was generated primarily from multibeam-echosounder data collected by the University of Washington in 2016, the Ocean Exploration Trust-Nautilus Exploration Program in 2015–17, and the National Oceanic and Atmospheric Administration (NOAA) in 2017. These datasets were processed in part by the U.S. Geological Survey (USGS). Additional smaller amounts of publicly available multibeam-bathymetry data collected by other federal and local agencies, academic institutions, and private firms were also incorporated into this map. Since the production of this map, other multibeam-bathymetry data have been collected in this region. Data sources (see fig. 1) and availability are as follows:

- University of Washington (processed by USGS), available at <https://doi.org/10.5066/F7DV1H3W> (last accessed March 2021)
- Ocean Exploration Trust's Nautilus Exploration Program (processed, in part, by USGS), cruises NA066, NA067, NA074, NA078, NA079, NA080, NA083, and NA088, data available from Ocean Exploration Trust's Nautilus Exploration Program, available at <https://www.oceanexplorationtrust.org/data-request> (last accessed March 2021)
- USGS datasets: Los Angeles margin, available at <https://pubs.usgs.gov/of/2002/0162/>; eastern Santa Barbara Channel, available at <https://pubs.usgs.gov/of/2005/1153> (last accessed March 2021)
- Scripps Institution of Oceanography (processed by USGS), available at <https://pubs.usgs.gov/sim/324/> (last accessed March 2021)
- California State University, Monterey Bay, Seafloor Mapping Lab and California Seafloor Mapping Program (<https://www.usgs.gov/centers/pcnsc/science/california-seafloor-mapping-program>) datasets: Santa Catalina Island, Santa Barbara Island, and San Nicolas Island, blocks A–C, cruise H11891, available at <https://seafloor.otsrllabs.org> (last accessed approximately 2018)
- NOAA's National Centers for Environmental Information datasets: cruises EX1101, MCD0212, MV1010, MV1406, SR1701, and H13093, available at <https://maps.ngdc.noaa.gov/viewers/bathymetry> (last accessed March 2021)
- NOAA's National Centers for Environmental Information, Southern California Coastal Relief Model, version 2, available at <https://ngdc.noaa.gov/mgg/coastal/grdas06/grdas06v2.htm> (last accessed March 2021)

Note that some rippled or smooth linear features and small mounds or depressions visible on map may be artifacts of data collection or processing.

REFERENCE CITED

Fisher, M.A., Sorlien, C.C., and Sliter, R.W., 2009. Potential earthquake faults offshore southern California from the eastern Santa Barbara channel to Dana Point, in Lee, H.J., and Normark, W.R., eds., Earth science in the urban ocean—The southern California Continental Borderland: Geological Society of America Special Paper 454, p. 271–290.

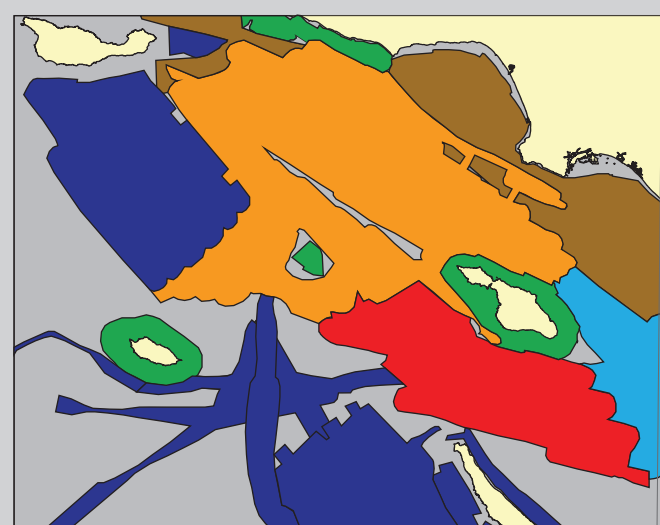


Figure 1. Map showing areas of multibeam-echosounder surveys that collected bathymetry data used to make this shaded-relief bathymetry map and includes agencies that collected data (data-processing agencies are indicated in parentheses). In areas where multibeam-echosounder bathymetry data are lacking, at the time of this map production (gray shading), shaded-relief bathymetry is from National Oceanic and Atmospheric Administration's Coastal Relief Model version 2 (NOAA CRM). Other abbreviations: CSMP, California Seafloor Mapping Program; CSUMB, California State University, Monterey Bay, Seafloor Mapping Lab; NCEI, NOAA's National Centers for Environmental Information; NOAA, National Oceanic and Atmospheric Administration; OET, Ocean Exploration Trust's Nautilus Exploration Program; SIO, Scripps Institution of Oceanography; USGS, U.S. Geological Survey; UW, University of Washington.

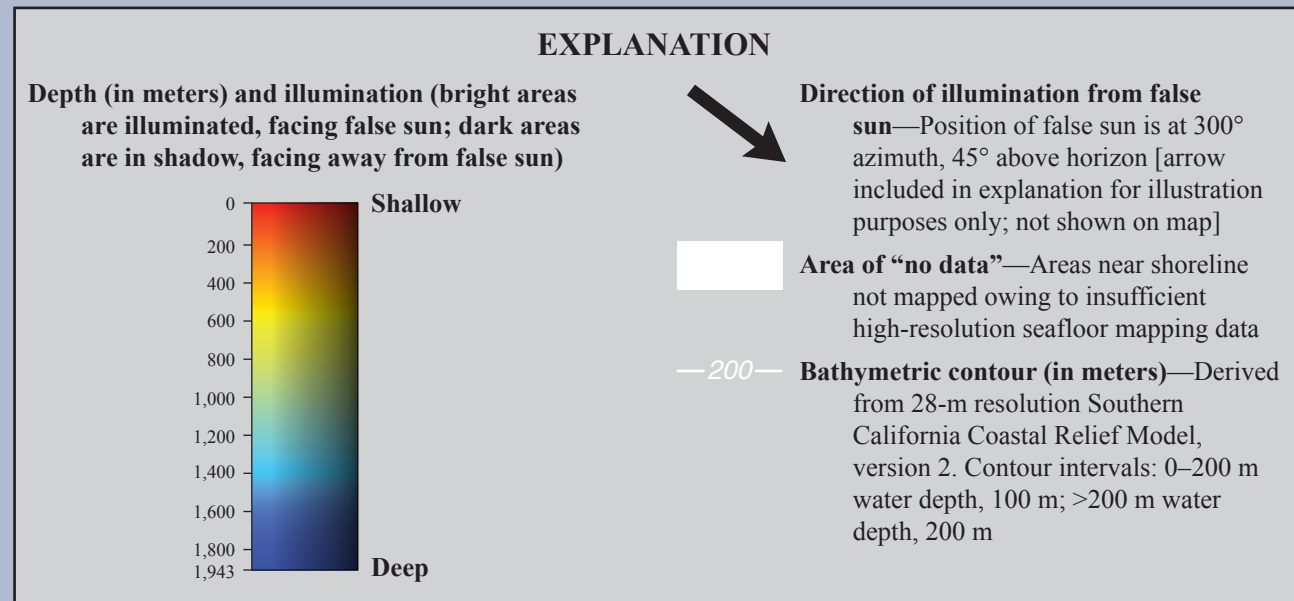
Onshore imagery modified from LANDSAT-8 satellite data from U.S. Geological Survey's Earth Explorer (available at <https://earthexplorer.usgs.gov/>)
Universal Transverse Mercator projection, Zone 11N
NOT INTENDED FOR NAVIGATIONAL USE

TRUE NORTH
APPROXIMATE TRUE
DECLINATION, 2021

SCALE 1:250,000
10 5 0 5 10 MILES
10 5 0 5 10 KILOMETERS
ONE MILE = 0.869 NAUTICAL MILES
BATHYMETRIC CONTOUR INTERVALS 100 AND 200 METERS

CALIF.
MAP LOCATION

Shaded-relief bathymetry and bathymetric contours by Peter Dartnell, 2017
Parts of the map used data provided by the Ocean Exploration Trust's Nautilus Exploration Program, Cruises NA066, NA067, NA074, NA078, NA079, NA080, NA083, and NA088
Parts of the map used data acquired, processed, archived, and distributed by the Seafloor Mapping Lab of California State University, Monterey Bay
GIS database and digital cartography by Peter Dartnell
Edited by Phil Frederick, digital cartographic production by Katie Sullivan
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Colored Shaded-Relief Bathymetry, Acoustic Backscatter, and Selected Perspective Views of the Northern Part of the California Continental Borderland, Southern California

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