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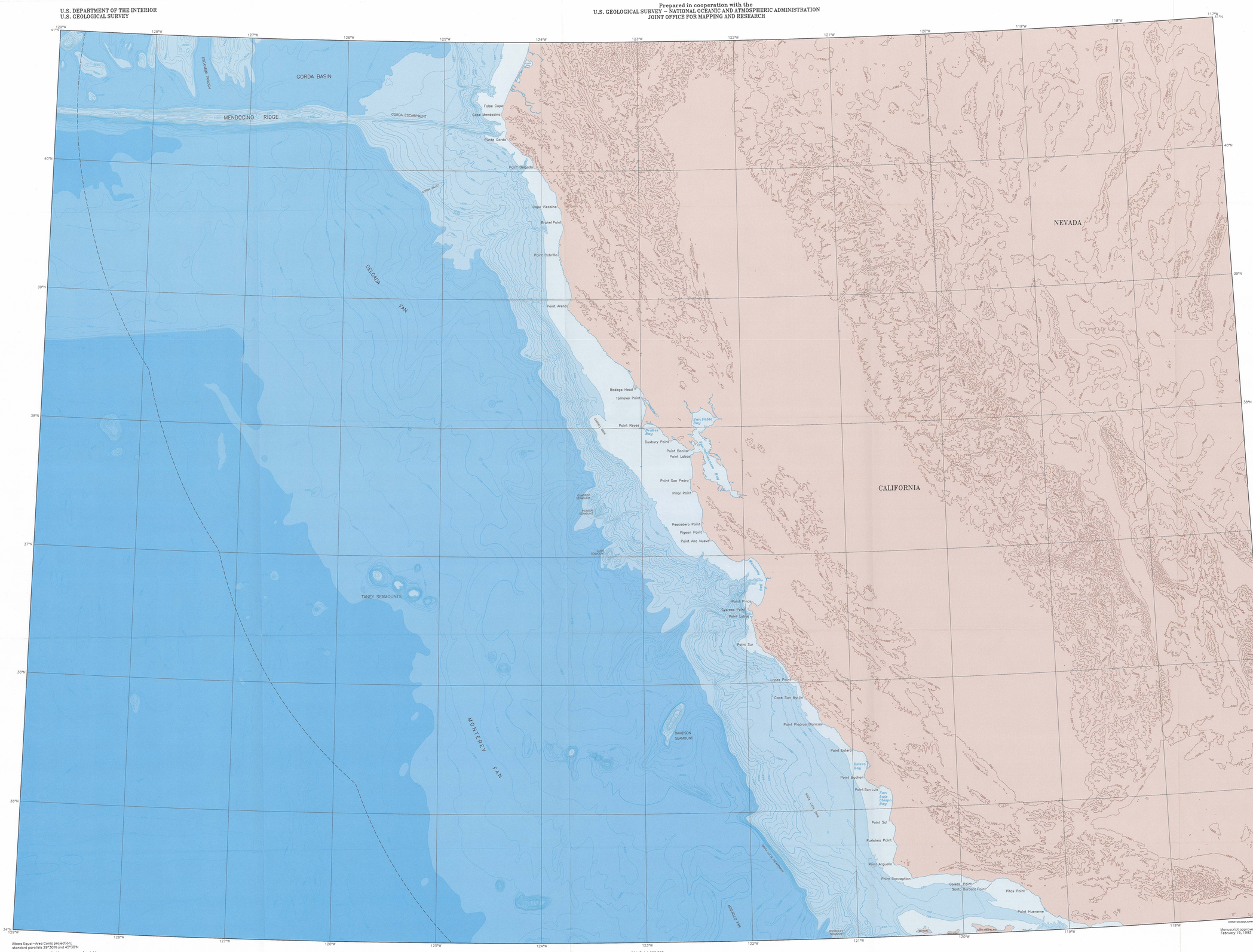
U.S. GEOLOGICAL SURVEY – NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
JOINT OFFICE FOR MAPPING AND RESEARCH

MISCELLANEOUS INVESTIGATIONS SERIES
MAP I–2090–C

Florence Lee Wong



EXPLANATION

SCALE, IN METERS

- SEA LEVEL
- 200
- 3000
- 4500

MAP SYMBOLS

- Bathymetric contour
- Topographic contour
- Exclusive Economic Zone boundary

DATA SOURCES

All contours, geographic outlines, and political boundaries shown on this map of the bottom topography, or bathymetry, of the Pacific continental margin between 34° and 41°N. latitudes were plotted from digital data bases in the library of the U.S. Geological Survey (USGS)–National Oceanic and Atmospheric Administration (NOAA) Joint Office for Mapping and Research (JOMAR). These digital data were obtained and compiled from many sources; consequently, data quality varies within particular data bases as well as from one data base to another.

Bathymetric contours were digitized from a map compiled by Chase and others (1981) and from the unpublished large scale versions of that map (T.E. Chase, unpub. maps, 1981). Data for the area seaward of the continental slope (~2000 m depth) were obtained primarily from the U.S. Coast and Geodetic Survey (C&GS) 1955 Pacific Exploratory Survey, a systematic and detailed (~8–nmi–trackline spacing) survey between Mexico and Canada. The USGS provided data from cruises 33–76–NC, 315–79–NC, 12–77–NC, L10–76–NC, and Bartlett 72. Data were also obtained from Scripps Institution of Oceanography cruises Merazine, Blue Flash, Kayak B, Scan I, and Seven Tow (Chase and Menard, 1971; Chase and others, 1975; Wilde and others, 1976; Wilde and others, 1978). The 200–m contour was derived from the National Ocean Survey charts 1306N–20 (1975), 1307N–11B (1974a), 1307N–18B (1974b), and C&GS chart 1305N–12 (1969). Sea–floor depths were corrected for sound velocity in sea water using Matthew's (1939) tables.

Onshore topographic contours were generated by computer from a modified version of 3–arc–second elevation data provided by the Defense Mapping Agency.

The United States digital shoreline was derived from the NOAA, National Ocean Service, Nautical Charting Division, National Atlas files data. The primary source of names of the sea floor features was the "Gazetteer of Undersea Features" (Defense Mapping Agency, 1990).

ACKNOWLEDGMENTS

Christopher Hlnes assisted in the construction and verification of the digital data bases. Reviews and suggestions by Edward C. Encewtz and Florence Wong and advice provided by Will Stettner regarding the cartographic design substantially improved the quality of this map.

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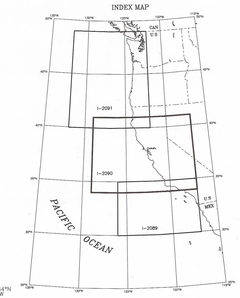
CONTINENTAL MARGIN MAPS

A part of the U.S. Geological Survey (USGS) marine mapping program is the preparation of the Continental Margin Map (CONMAP) series at a scale of 1:1,000,000. These maps are organized in overlapping panels that provide complete coverage of the Nation's Exclusive Economic Zone (EEZ). This map is one of three that provide coverage of the Pacific continental margin of the conterminous United States.

INDEX MAP



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Albers Equal–Area Conic projection; standard parallels 29°30'N and 45°30'N

Bathymetric data compiled from sources of variable quality. This information is not intended for navigational purposes.

SCALE 1:1 000 000

0 25 50 75 100 NAUTICAL MILES
0 25 50 75 100 125 150 175 200 KILOMETERS
0 25 50 75 100 STATUTE MILES

TOPOGRAPHIC CONTOUR INTERVAL 500 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVALS: 200 METERS TO 3000–METER DEPTH, 100 METERS FROM 3000–METER DEPTH TO MAXIMUM DEPTH
DATUM: MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

MAP SHOWING BOTTOM TOPOGRAPHY OF THE PACIFIC CONTINENTAL MARGIN, CAPE MENDOCINO TO POINT CONCEPTION

By

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1992

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