

**LEGEND**  
 MERCATOR PROJECTION  
 SCALE  
 1 TO 864,518 AT 38° LATITUDE  
 CONTOUR INTERVAL = 100 METERS  
 CORRECTED FOR SOUND VELOCITY  
 FROM MATTHEWS TABLES, AREAS 43  
 AND 44.  
 EXPLANATION

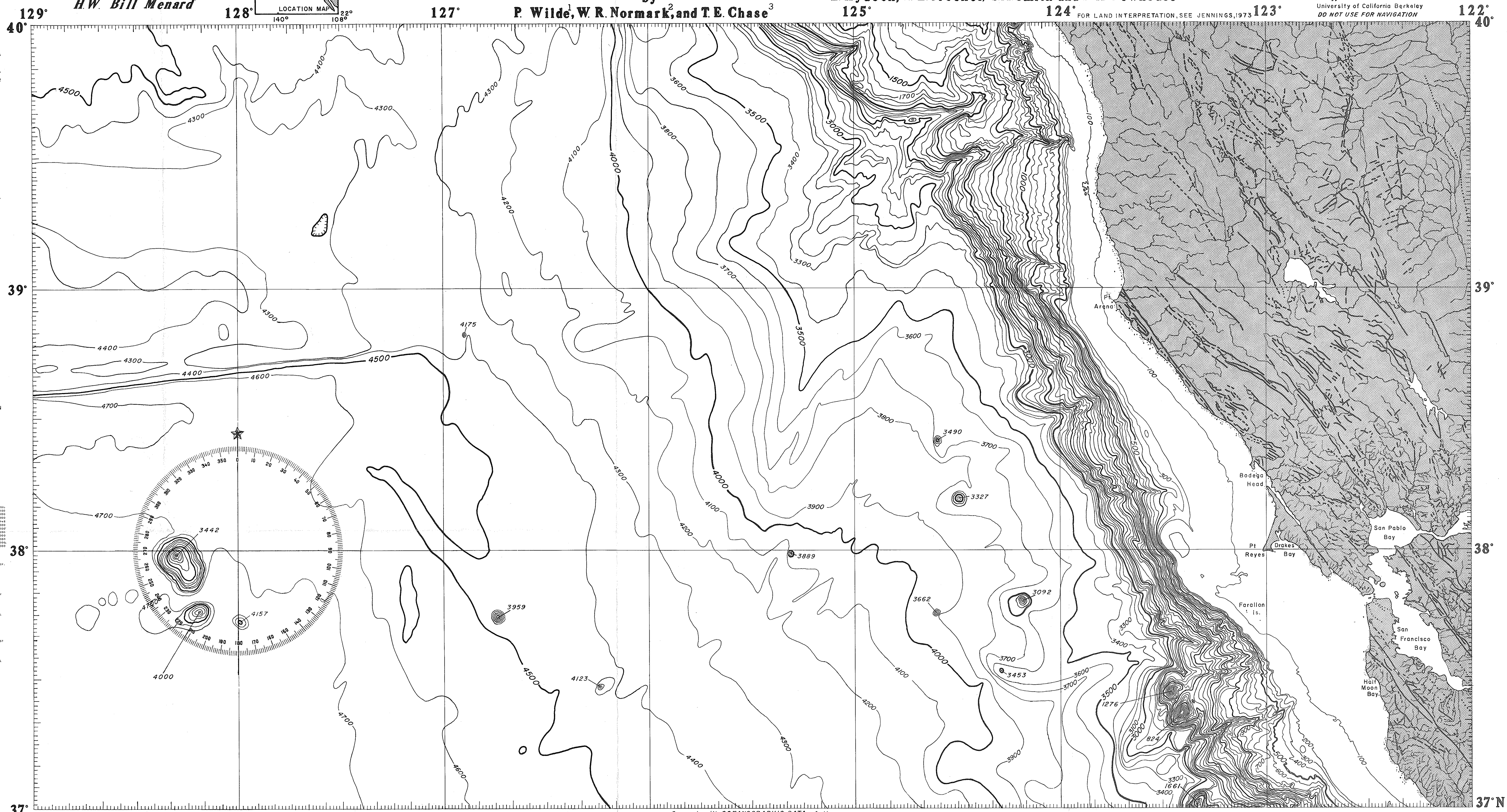
It occurs to us that this  
 chart be dedicated to:  
**H.W. "Bill" Menard**

**OCEANOGRAPHIC DATA off CENTRAL CALIFORNIA  
 37° to 40° North including the DELGADA DEEP SEA FAN**

1<sup>st</sup> Edition, April, 1976  
 Prepared at  
 Geologic Data Center  
 Scripps Institution of Oceanography  
 Assisted by  
 L. Hydock, W.L. Crocker, S.M. Smith and D.A. Newhouse

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 DO NOT USE FOR NAVIGATION

by  
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THE FAVORABLE RESPONSE TO THE MONTEREY FAN CHART (IMR-TR-58) HAS LED US TO ISSUE A COMPANION CHART COVERING THE OFFSHORE AREAS TO THE NORTH. THIS DATA COMPILATION IS THE SECOND OF A PROJECTED SERIES OF FIVE SUCH COMPILATIONS EXTENDING TO THE CANADIAN BORDER. THE AIM OF THIS WORK IS TO PROVIDE A CHART OF CONVENIENT SIZE THAT (1) SUMMARIZES ALL THE OCEANOGRAPHIC DATA TO DATE FOR A PARTICULAR AREA; (2) CAN BE USED BOTH AS A PLANNING DOCUMENT FOR UPCOMING CRUISES AND (3) AS A WORKING CHART DURING SHIPBOARD OPERATIONS; BUT (4) THAT COULD BE EASILY REVISED AND MODIFIED AS NEW INFORMATION IS RECEIVED FROM VARIOUS SOURCES. ALTHOUGH WE ARE MARINE GEOLOGISTS, WE RECOGNIZE THAT DATA FROM ALL OF THE BRANCHES OF OCEANOGRAPHY WILL ULTIMATELY HAVE BEARING ON MARINE GEOLOGIC PROBLEMS. THIS WE HAVE INCLUDED DATA FROM OTHER FIELDS OF MARINE SCIENCES.

WE CHOSE THE HYDROGRAPHIC OFFICERS'S 3000 SERIES AS A CONVENIENT BASE FOR PLOTTING BECAUSE IT IS FAMILIAR TO BOTH OCEANOGRAPHERS AND PROFESSIONAL MARINERS AND ESPECIALLY BECAUSE (1) BLANK CHARTS AT THIS SCALE ARE READILY AVAILABLE; (2) THE NAVY'S BC SERIES AT THE SAME SCALE CAN BE USED FOR THE LAND BOUNDARIES; AND (3) THE BASE CHARTS AT THE SCRIPPS GEOLOGIC DATA CENTER INCLUDING THE COMPILATION TRACK CHARTS ARE ON 3000 SERIES BASES OR ENLARGEMENTS THEREOF.

CORRECTED METERS, AT 100 METER INTERVALS, IS THE BATHYMETRIC STANDARD FOR THE CONTOURS IN ACCORD WITH THE CONVERSION OF AMERICAN NAUTICAL CHARTS TO METRIC UNITS. IN 1976 VAST MAJORITY OF DEPTH SOUNDERS ON AMERICAN OCEANOGRAPHIC SHIPS STILL DISPLAY DEPTHS IN UNCORRECTED FATHOMS (CALIBRATED FOR A FIXED SPEED OF SOUND OF 800 FATHOMS PER SECOND) SO THAT THIS CHART CAN NOT BE CHECKED DIRECTLY AT SEA WITHOUT CONVERTING FROM FATHOMS TO METERS AND WITHOUT CORRECTION FOR THE VARIABLE SPEED OF SOUND IN REAL SEA WATER BY USING MATTHEWS TABLES OR EQUIVALENT CONVERSIONS. WE BELIEVE A CHART OF TRUE BOTTOM DEPTHS IS MORE VALUABLE TO THE MARINE SCIENTIST THAN ONE WHICH MAY BE COMPARED WITH THE OUTPUT OF DEPTH SOUNDERS PRESENTLY USED. BY THIS DECISION WE ARE HOPEFUL FOR FUTURE IMPROVEMENTS IN THE COLLECTION OF BATHYMETRIC DATA.

THE SCALE AND PROJECTION OF THE SUPPLEMENTAL FIGURES IS THAT USED BY THE SCRIPPS GEOLOGIC DATA CENTER FOR COMPILATION OF TRACK LINES OF VARIOUS CRUISES. THE SUBJECT MATTER OF THE ADDITIONAL FIGURES, IN ESSENCE, IS A DIGEST OF WHAT OCEANOGRAPHIC INFORMATION HAS BEEN COMPILED, AT THIS STAGE, AND WE RELIED ON AVAILABLE WORK AND DID LITTLE OR NO REVISION OURSELVES. OUR PHILOSOPHY HAS BEEN THAT THE WORKERS IN A PARTICULAR DISCIPLINE KNOW MORE ABOUT THE QUALITY AND THE APPLICABILITY OF THEIR DATA THAN WE DO, SO THEIR DATA IS PRESENTED IN UNEDITED FORM EXCEPT FOR DRAFTING MODIFICATIONS TO MAINTAIN A STANDARD FORMAT. IF THE READER REQUIRES ADDITIONAL INFORMATION OR HAS QUESTIONS ABOUT THE DATA, WE HAVE GIVEN AN ADDRESS OR CONTACT FOR THE SOURCE OF DATA. IN THIS MANNER WE HOPE TO LINK DIRECTLY THE POTENTIAL USER OF THE DATA TO PEOPLE RESPONSIBLE FOR THE GENERATION OF THE DATA. IN PARTICULAR WE HAVE SOUGHT TO IDENTIFY DATA BANKS WHERE COMPILATIONS OF DATA IN VARIOUS FORMATS ARE READILY AVAILABLE TO THE USER.

THE REFERENCES LISTED ARE EXTENSIVE (BUT UNLIKELY TO BE EXHAUSTIVE) OF THOSE WRITTEN ABOUT THE AREA. WE LIST PARTICULARLY THOSE PAPERS AND REPORTS THAT WE BELIEVE TO BE OF GENERAL INTEREST AND LET THE READER USE BIBLIOGRAPHIES SUCH AS BY TERRY, (1955) AND BY CROCKER AND OTHERS, (1953) TO PURSUE MORE SPECIFIC INTERESTS. ALSO WE INCLUDE REPORTS OF LIMITED AVAILABILITY BUT WHICH CONTAIN RAW DATA OR MORE COMPLETE DATA THAN IS PERMITTED BY SPACE CONSCIOUS JOURNALS. BECAUSE OF SPACE LIMITATIONS WE ARE NOT INCLUDING AN EXTENSIVE BIBLIOGRAPHY FOR PAPERS CONCERNED EXCLUSIVELY WITH SAN FRANCISCO BAY. WE PLAN A SEPARATE COMPILATION IN THIS FORMAT FOR SAN FRANCISCO BAY.

OUR BASE CHART IS NOT TO BE USED FOR NAVIGATION. WE LIST THE PUBLISHED NAVIGATIONAL CHARTS PLUS THE PERTINENT COAST PILOT FOR THOSE PLANNING CRUISES IN THE AREA. THE COAST PILOT IS A VALUABLE AID AND IT GIVES WEATHER AND HARBOR INFORMATION WHICH IS NECESSARY FOR OPERATIONS IN THE ALL TOO ROUGH AND STORMY SEAS OFF THE CALIFORNIA COAST.

AGAIN, WE SOLICIT COMMENTS ABOUT THE APPROACH USED, THE FORMAT, CONTENT, ETC. OF THIS CHART AS WE INTEND TO PRODUCE CHARTS OF OTHER AREAS IN THIS GENERAL STYLE.

QUART	ROCKPORT LANDING	1:10,000
1900	1884	1:10,000
1901	1885	1:10,000
1902	1886	1:10,000
1903	1887	1:10,000
1904	1888	1:10,000
1905	1889	1:10,000
1906	1890	1:10,000
1907	1891	1:10,000
1908	1892	1:10,000
1909	1893	1:10,000
1910	1894	1:10,000
1911	1895	1:10,000
1912	1896	1:10,000
1913	1897	1:10,000
1914	1898	1:10,000
1915	1899	1:10,000
1916	1900	1:10,000
1917	1901	1:10,000
1918	1902	1:10,000
1919	1903	1:10,000
1920	1904	1:10,000
1921	1905	1:10,000
1922	1906	1:10,000
1923	1907	1:10,000
1924	1908	1:10,000
1925	1909	1:10,000
1926	1910	1:10,000
1927	1911	1:10,000
1928	1912	1:10,000
1929	1913	1:10,000
1930	1914	1:10,000
1931	1915	1:10,000
1932	1916	1:10,000
1933	1917	1:10,000
1934	1918	1:10,000
1935	1919	1:10,000
1936	1920	1:10,000
1937	1921	1:10,000
1938	1922	1:10,000
1939	1923	1:10,000
1940	1924	1:10,000
1941	1925	1:10,000
1942	1926	1:10,000
1943	1927	1:10,000
1944	1928	1:10,000
1945	1929	1:10,000
1946	1930	1:10,000
1947	1931	1:10,000
1948	1932	1:10,000
1949	1933	1:10,000
1950	1934	1:10,000
1951	1935	1:10,000
1952	1936	1:10,000
1953	1937	1:10,000
1954	1938	1:10,000
1955	1939	1:10,000
1956	1940	1:10,000
1957	1941	1:10,000
1958	1942	1:10,000
1959	1943	1:10,000
1960	1944	1:10,000
1961	1945	1:10,000
1962	1946	1:10,000
1963	1947	1:10,000
1964	1948	1:10,000
1965	1949	1:10,000
1966	1950	1:10,000
1967	1951	1:10,000
1968	1952	1:10,000
1969	1953	1:10,000
1970	1954	1:10,000
1971	1955	1:10,000
1972	1956	1:10,000
1973	1957	1:10,000
1974	1958	1:10,000
1975	1959	1:10,000
1976	1960	1:10,000
1977	1961	1:10,000
1978	1962	1:10,000
1979	1963	1:10,000
1980	1964	1:10,000
1981	1965	1:10,000
1982	1966	1:10,000
1983	1967	1:10,000
1984	1968	1:10,000
1985	1969	1:10,000
1986	1970	1:10,000
1987	1971	1:10,000
1988	1972	1:10,000
1989	1973	1:10,000
1990	1974	1:10,000
1991	1975	1:10,000
1992	1976	1:10,000
1993	1977	1:10,000
1994	1978	1:10,000
1995	1979	1:10,000
1996	1980	1:10,000
1997	1981	1:10,000
1998	1982	1:10,000
1999	1983	1:10,000
2000	1984	1:10,000

**ACKNOWLEDGMENTS**  
 WE WISH TO THANK THE FOLLOWING INDIVIDUALS AND THEIR SPONSORING GROUPS FOR THEIR HELP IN COMPILING THE INFORMATION PRESENTED HERE:  
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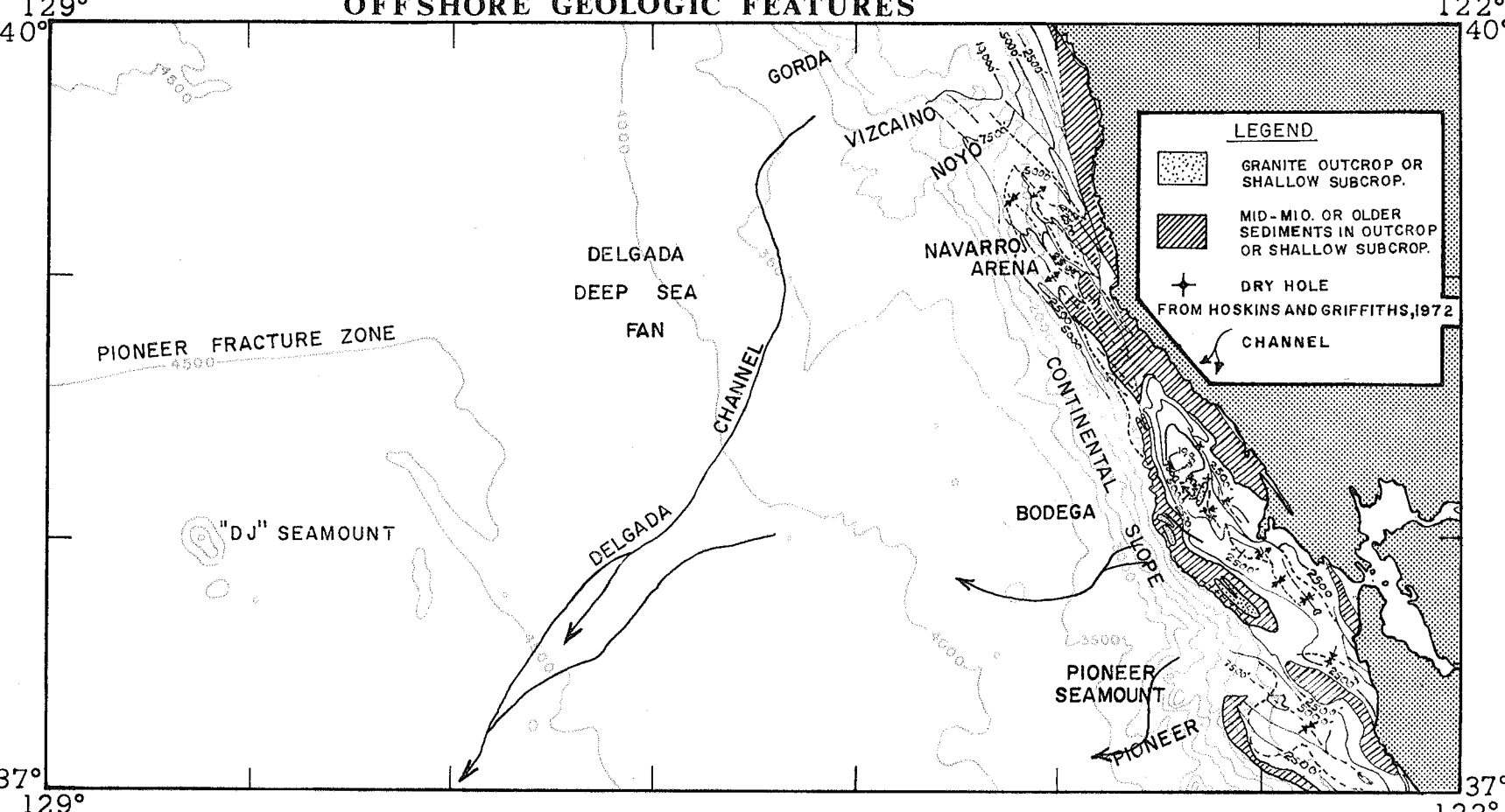


FIGURE 1. MAJOR GEOLOGIC FEATURES IN THE AREA.

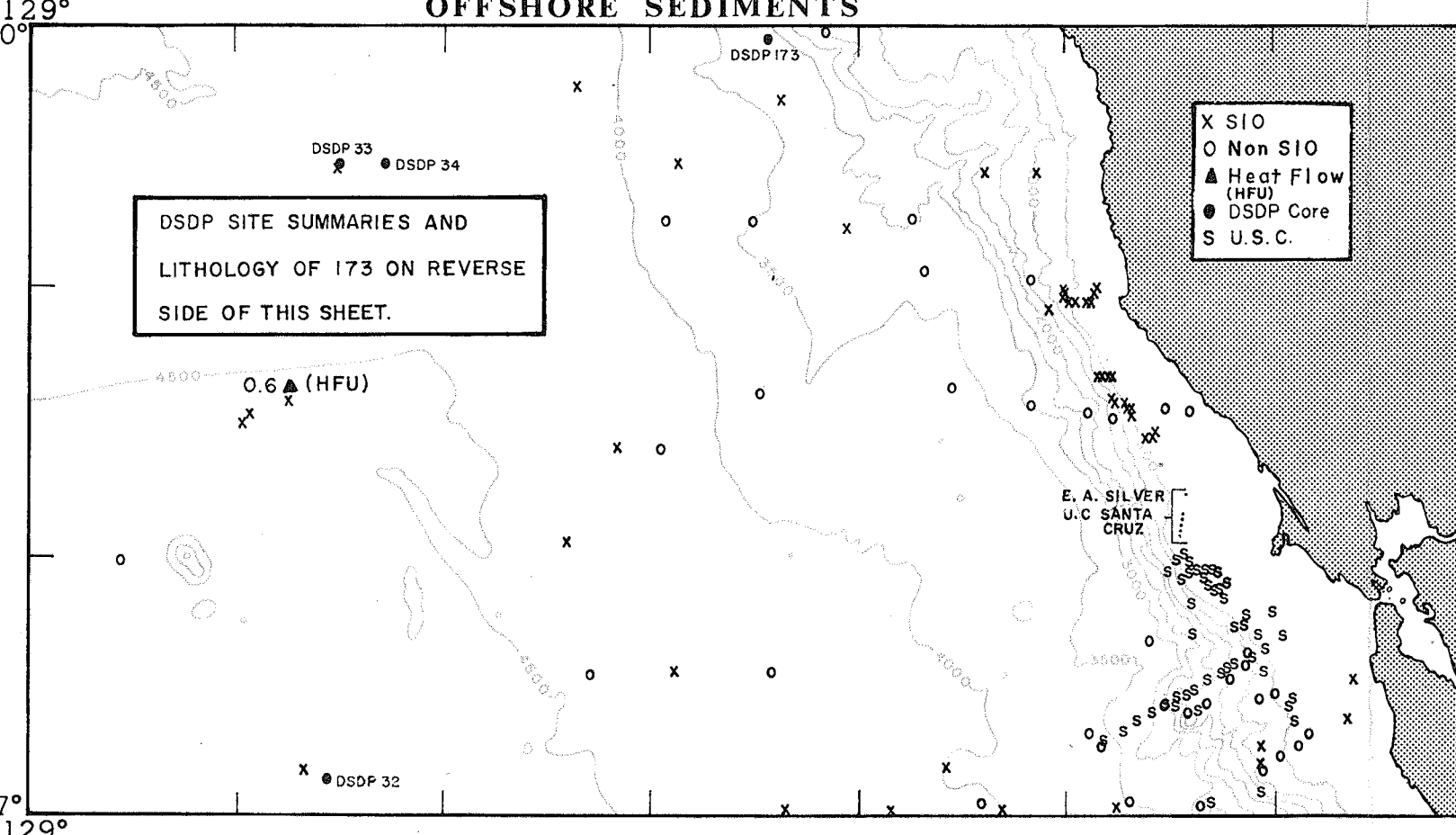


FIGURE 2. X'S AND O'S DATA IN SIO WORLD OCEAN SEDIMENT DATA BANK. FOR INFORMATION CONTACT: J.Z. FRAZER, SCRIPPS INSTITUTION OF OCEANOGRAPHY. FOR OTHERS, CONTACT LISTED INSTITUTIONS.

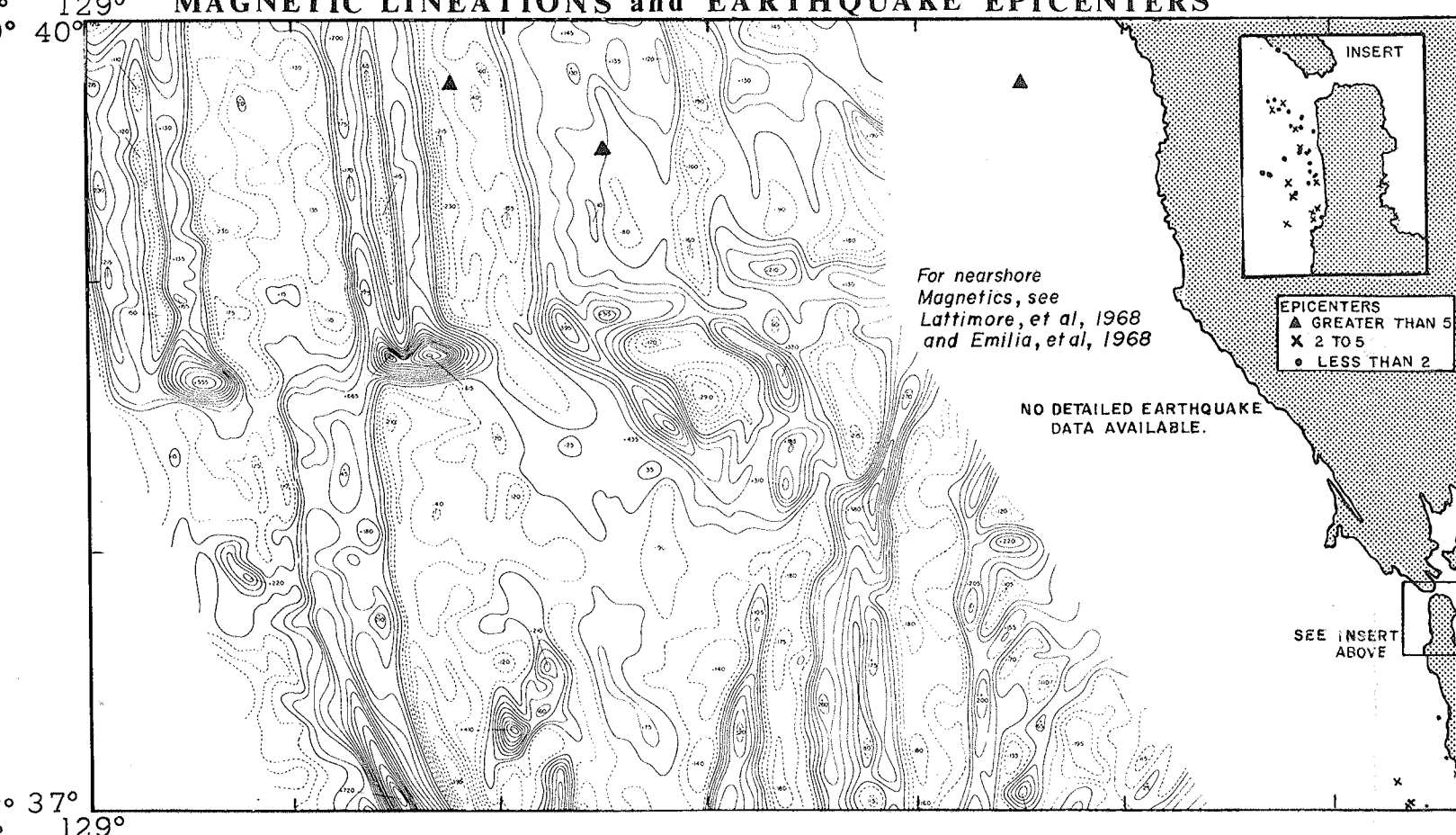


FIGURE 3. MAGNETIC LINEATIONS FROM MASON AND RAFF, 1961. CONTOUR INTERVAL IS 50 GAMMAS. EPICENTERS FROM GREENE, ET AL., 1975 AND USGS.

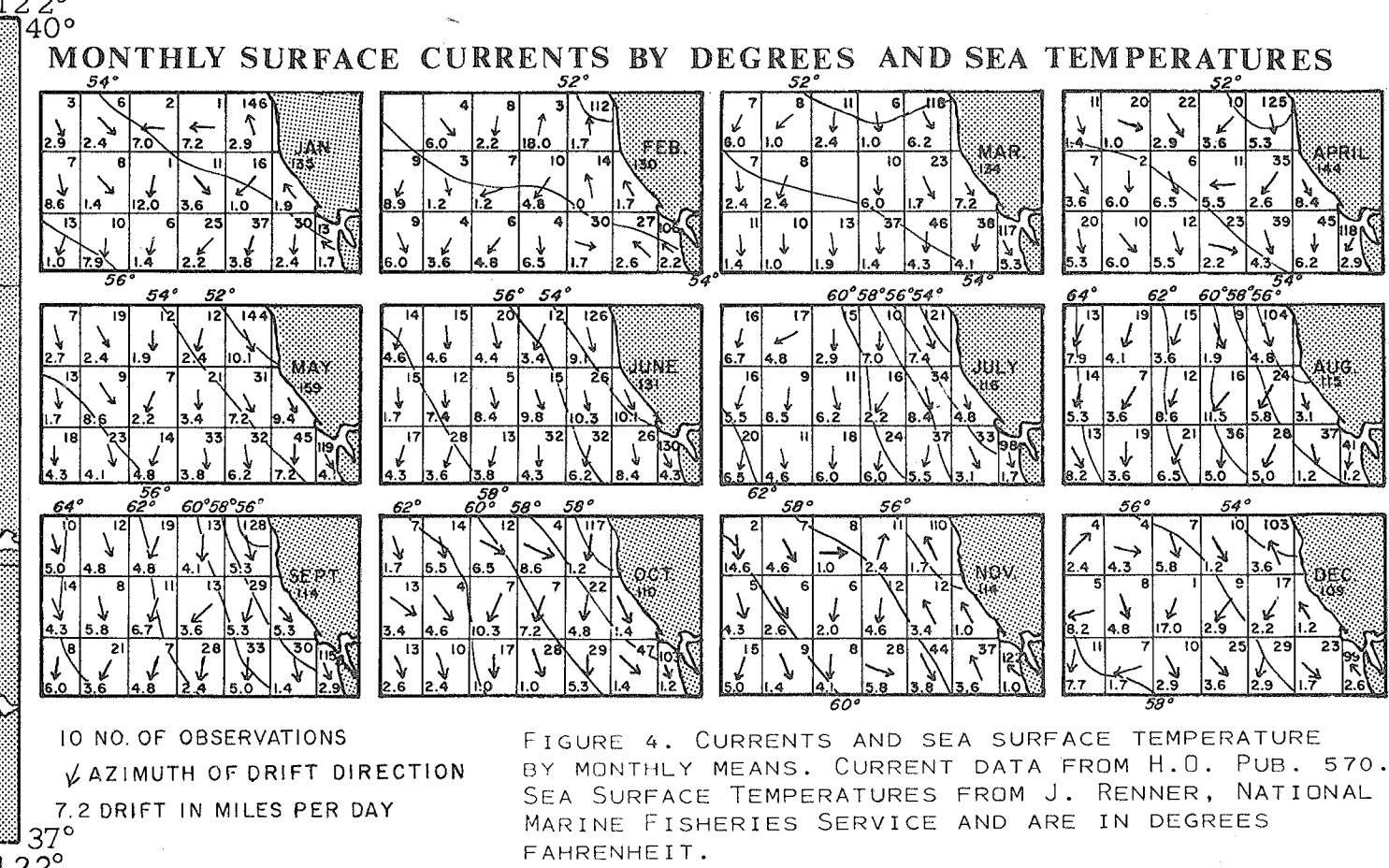


FIGURE 4. CURRENTS AND SEA SURFACE TEMPERATURE BY MONTHLY MEANS. CURRENT DATA FROM H.O. PUB. 570. SEA SURFACE TEMPERATURES FROM J. RENNER, NATIONAL MARINE FISHERIES SERVICE AND ARE IN DEGREES FAHRENHEIT.