

NATIONAL OCEAN SURVEY SAILING & GENERAL CHARTS		
CHART NUMBER	TITLE	SCALE
5602	POINT ARENA TO TRINIDAD HEAD	1:200,000
5702	TRINIDAD HEAD TO CAPE BLANCO	1:196,984
5795	CAPE MENDOCINO AND VICINITY	1:40,000
5832	HUMBOLDT BAY	1:25,000
5895	ST. GEORGE REEF AND CRESCENT CITY HBR.	1:40,000
5951	CAPE SEBASTIAN TO HUMBOLDT MT.	1:40,000
5952	PORT ORFORD TO CAPE BLANCO	1:40,000
NOS SEAMAP SERIES (1:1,000,000)		PILOT CHART
1204-12M MAGNETICS	1204-12G GRAVITY	1204-12B BATHYMETRY
		U.S. COAST PILOT NO. 7, PACIFIC COAST U.S. DEPT. OF COMMERCE

Dedicated to  
our good friend and colleague  
**Eugene A. "Gene" Rusnak**

# OCEANOGRAPHIC DATA off NORTHERN CALIFORNIA-SOUTHERN OREGON

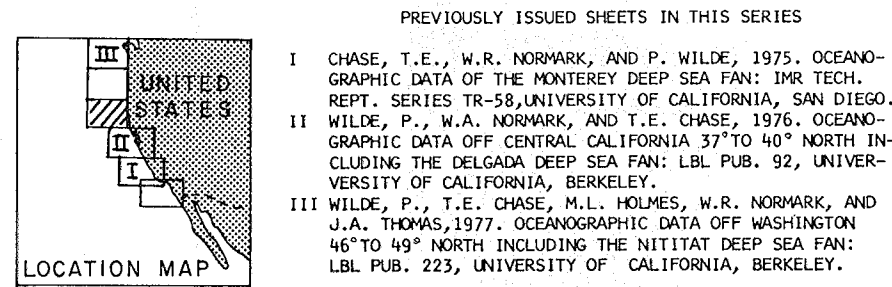
## 40° to 43° North including the GORDA DEEP SEA FAN

by  
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Earth Sciences Division  
University of California  
Berkeley, California 94720



SCALE  
1 TO 815,482 AT 42°N LATITUDE  
CONTOUR INTERVAL = 100 METERS  
CORRECTED FOR SOUND VELOCITY  
FROM MATTHEWS TABLES, AREAS 24  
AND 44

BOTTOM CONTOURS FROM R.J. HURLEY, D.A. MC MANUS, H.W. MENARD, T.E. CHASE, J. MAWREKICK, AND NATIONAL OCEAN SURVEY. NOS SOUNDINGS SUPPLIED BY LT. C.B. LAWRENCE, NOAA CORPS.

### EXPLANATION

THIS DATA COMPILATION IS A COMPANION SHEET TO SEVERAL PREVIOUSLY ISSUED MAPS PROVIDING OFFSHORE COVERAGE OF THE WEST COAST OF THE UNITED STATES BETWEEN LATITUDE 34° NORTH AND THE CANADIAN BORDER (SEE LOCATION MAP AT LEFT).

THE AIM OF THIS WORK IS TO PROVIDE A MAP OF CONVENIENT SIZE WHICH (1) SUMMARIZES THE OCEANOGRAPHIC DATA TO DATE FOR A PARTICULAR AREA; (2) CAN BE USED BOTH AS A

BASE MAP FOR GEOLOGICAL INVESTIGATIONS AND (3) CAN BE A WORKING CHART DURING SHIPBOARD OPERATIONS; AND (4) COULD BE EASILY REVISED AND MODIFIED AS NEW INFORMATION BECOMES AVAILABLE.

ALTHOUGH WE ARE MARINE GEOLOGISTS, WE RECOGNIZE DATA FROM OTHER BRANCHES OF OCEANOGRAPHY WILL ULTIMATELY HAVE BEARING ON MARINE GEOLOGIC PROBLEMS. THUS WE HAVE INCLUDED DATA FROM OTHER FIELDS OF MARINE SCIENCES.

THE REFERENCES LISTED ARE EXTENSIVE (BUT UNLIKELY TO BE EXHAUSTIVE) OF THOSE WRITTEN ABOUT THE AREA. WE LIST PARTICULARLY THOSE PAPERS AND REPORTS WE BELIEVE TO BE OF GENERAL INTEREST AND LET THE READER USE BIBLIOGRAPHIES FOR DETAILS.

AS OUR BASE MAP IS NOT TO BE USED FOR NAVIGATION, WE LIST THE PUBLISHED NAVIGATION CHARTS PLUS THE PERTINENT

COAST PILOT FOR THOSE PLANNING CRUISES IN THE AREA. THE COAST PILOT IS A VALUABLE AID AS IT GIVES WEATHER AND HARBOR INFORMATION WHICH IS NECESSARY FOR OPERATIONS IN THE ROUGH SEA OFF THE COAST.

FOR REFERENCE CAPTION, USE:  
WILDE, P., CHASE, T.E., HOLMES, M.L., NORMARK, W.R., THOMAS, J.A., MCCULLOCH, D.S., AND KULM, L.D., 1978, OCEANOGRAPHIC DATA OFF NORTHERN CALIFORNIA-SOUTHERN OREGON 40° TO 43° NORTH INCLUDING THE GORDA DEEP SEA FAN., LBL PUB.251, UNIVERSITY OF CALIFORNIA, BERKELEY.

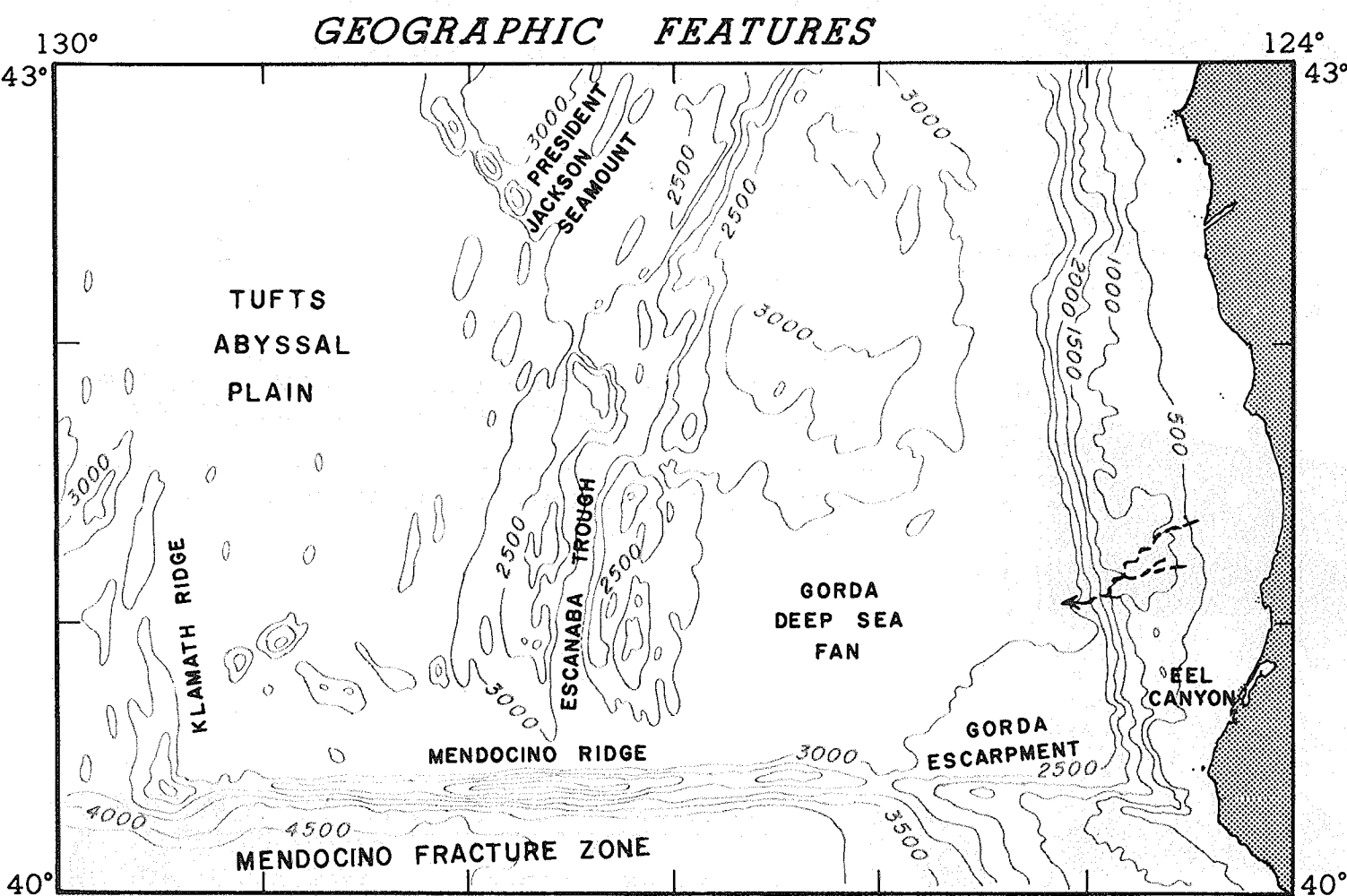


FIGURE 1. MAJOR GEOGRAPHIC FEATURES IN THE AREA.

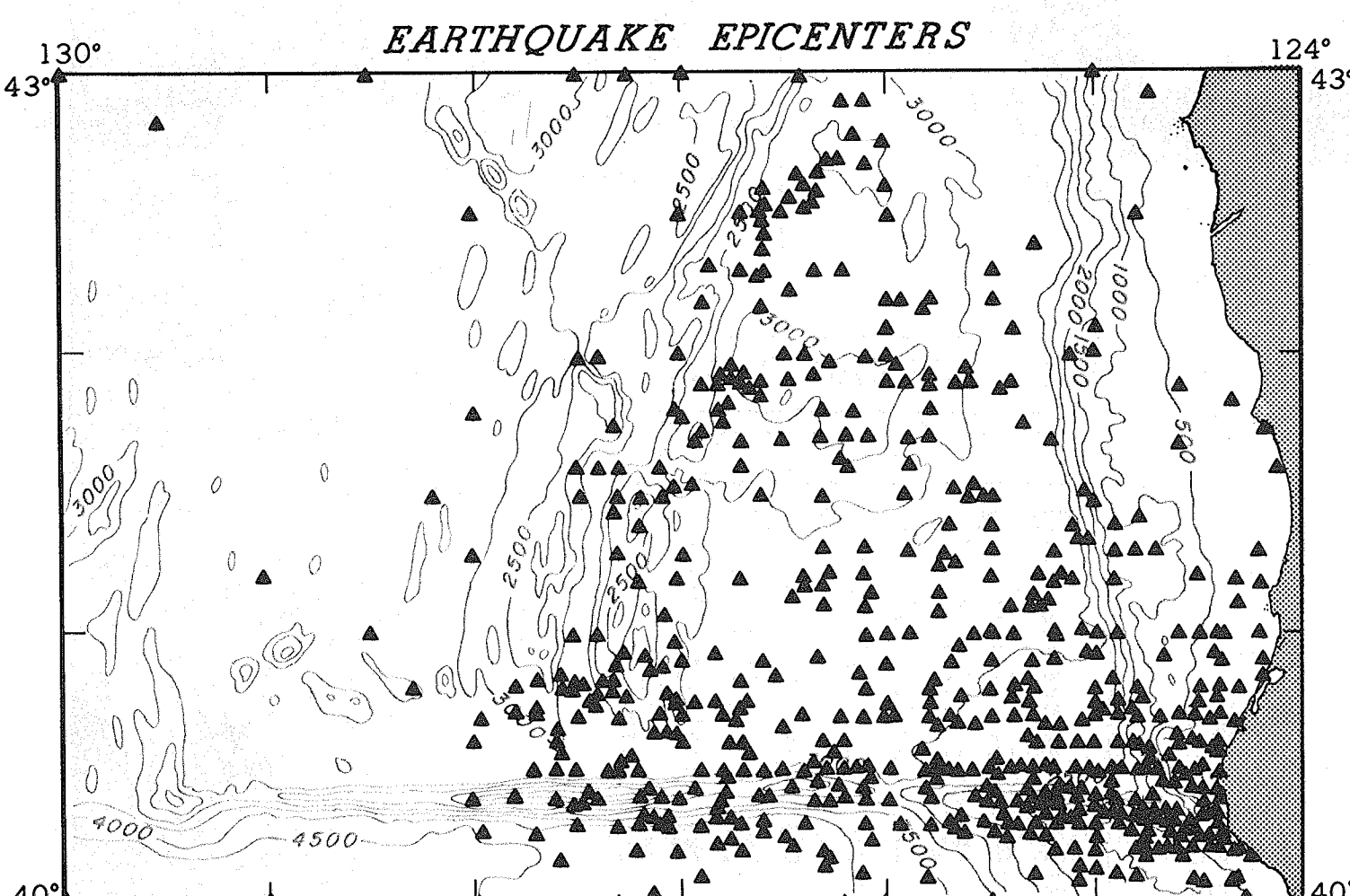


FIGURE 2. OFFSHORE EPICENTERS. FROM BERKELEY SEISMOGRAPHIC STATION, PLOT FROM P.J. GRIM AND W.A. RINEHART, NGSDC/NOAA.

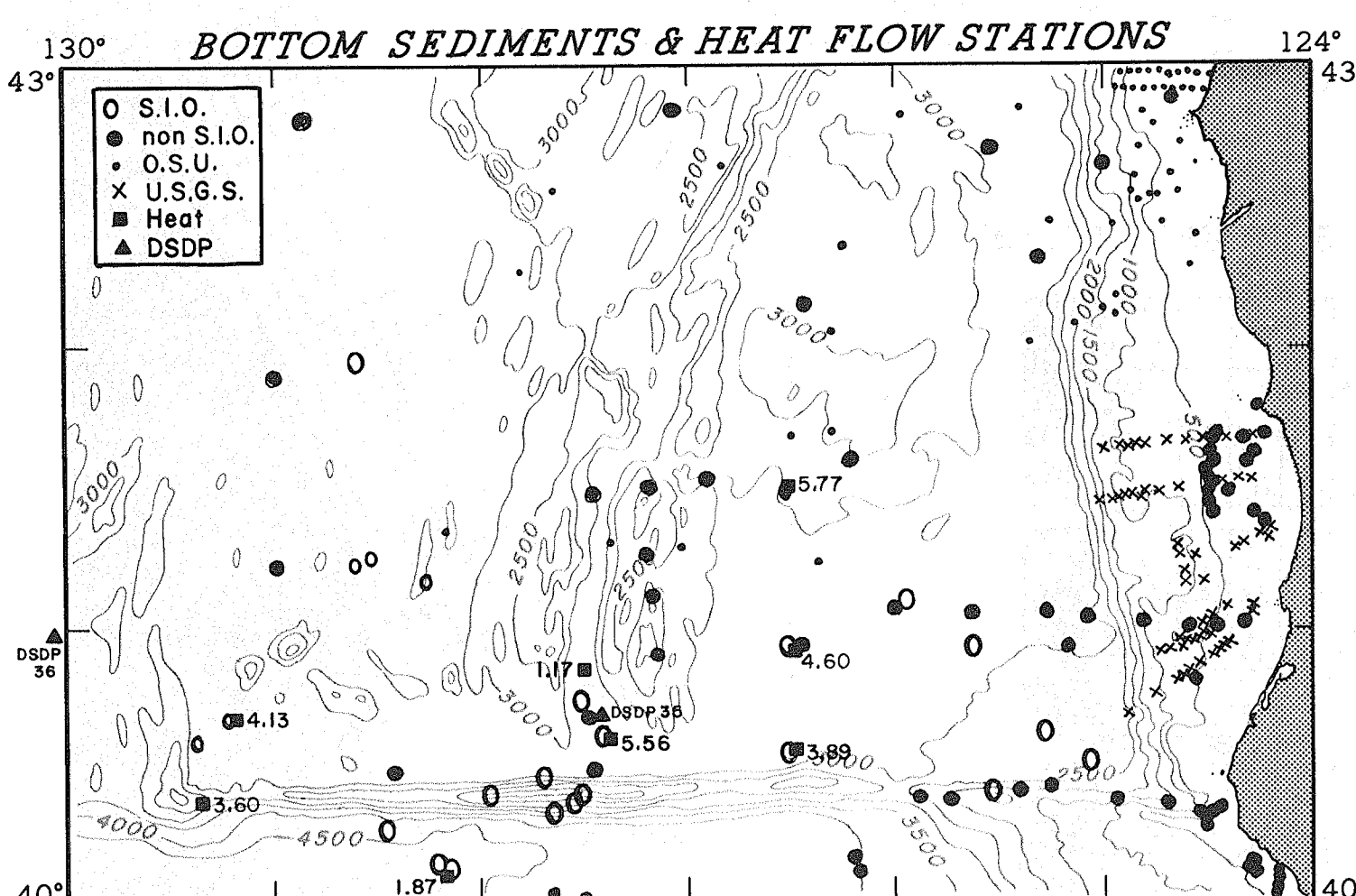
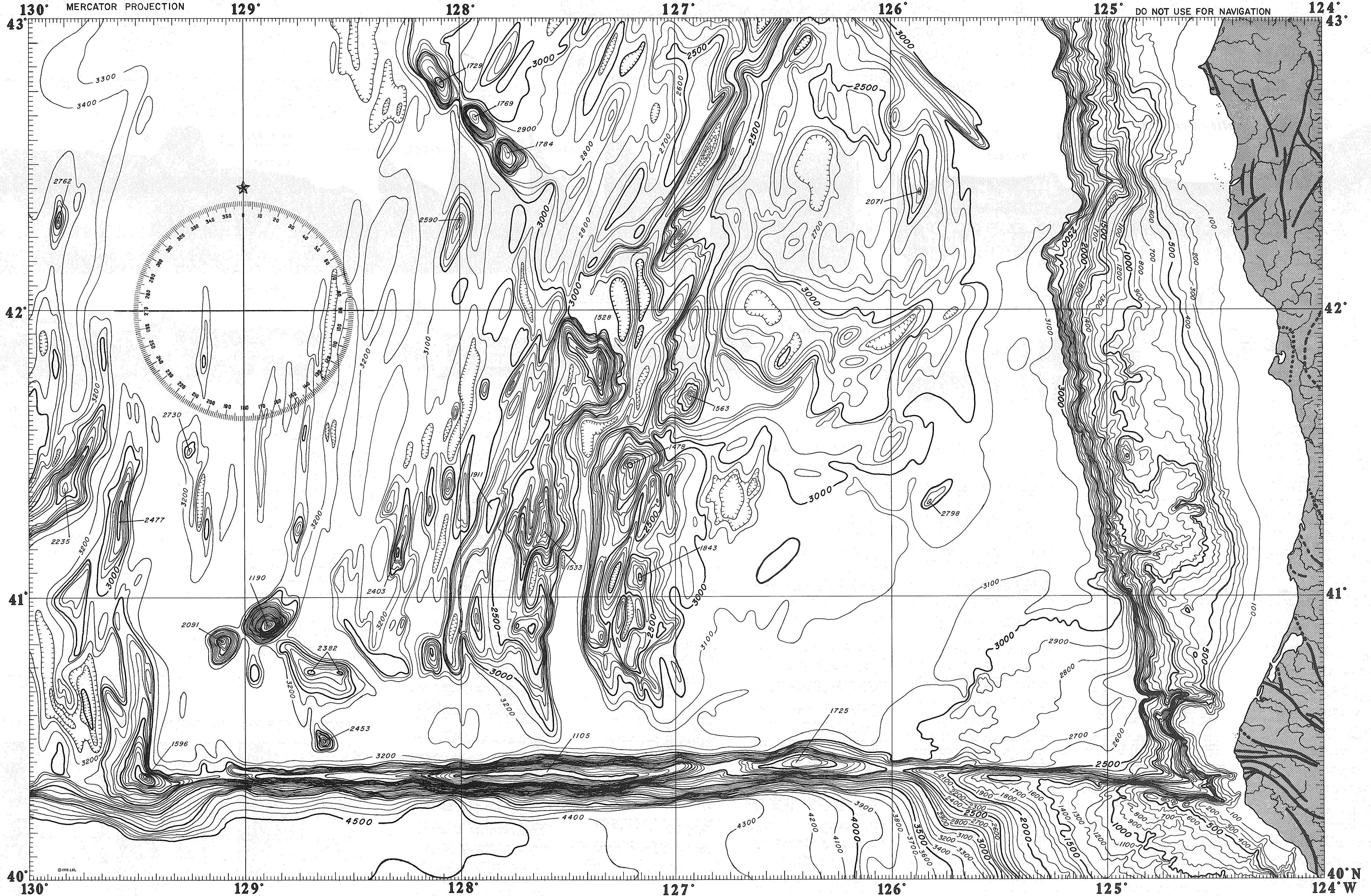


FIGURE 3. SEDIMENTS FROM J.Z. FRAZER, SIO WORLD OCEAN SEDIMENT DATA BANK; R.A. COMBELLICK AND C.W. POTTER, NGSDC/NOAA; AND L.D. KULM, OREGON STATE UNIVERSITY. HEAT FLOW DATA (IN MICROCALORIES/CM/SECOND) FROM P.J. GRIM, NGSDC/NOAA. FOR INFORMATION ABOUT DEEP SEA DRILLING PROJECT DATA, CONTACT B.J. LONG, DSDP, UNIVERSITY OF CALIFORNIA, SAN DIEGO.



MERCATOR PROJECTION

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FORMERLY WITH NOAA/NGSDC: R.A. COMBELLICK AND J.S. SPENCER.

NOTE: THE DATA LISTED HERE IS OFTEN AVAILABLE FROM THE NATIONAL GEOPHYSICAL AND SOLAR-TERRRESTRIAL DATA CENTER, BOULDER, COLORADO. IT IS SUGGESTED HOWEVER, THAT THE USER CONTACT THE ORIGINAL SOURCE TO CHECK ON AVAILABILITY AND COSTS.

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- U.S. GEOLOGICAL SURVEY, SEATTLE, WASHINGTON, 98105
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