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MULTICHANNEL SEISMIC-REFLECTION PROFILES COLLECTED IN 1977 IN THE NORTHERN BERING SEA

by

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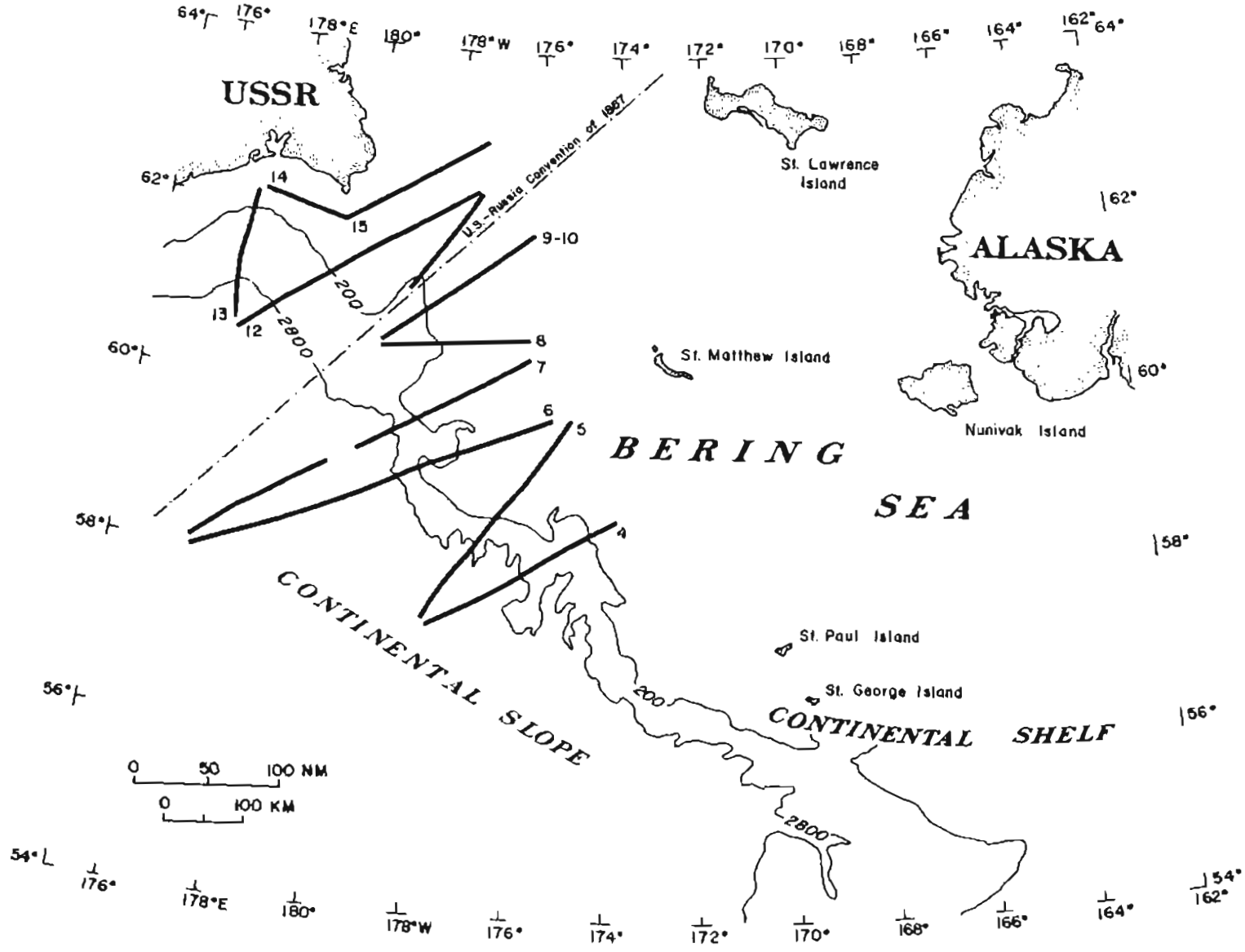
During 1977 the U.S. Geological Survey collected 3200 km of 24 channel seismic-reflection data across the continental margin in the northeastern Bering Sea (Fig. 1). The profiles were collected on the R/V S.P. LEE using a sound source of five air guns totalling 1,326 in^3. The recording equipment consists of a 24-channel streamer, 2400 meters long with a group interval of 100 m, and a GUS (Global Universal Science) Model 4200 digital recording system. Shot records were sampled and recorded at a 2 millisecond rate, and later processed at a 4 millisecond rate. Navigational control of the survey was by satellite fixes augmented by Loran C. (Rho-Rho) and doppler-sonar bottom-track navigation.

The seismic reflection records vary from 6 to 12 seconds in length depending upon water depth and geologic structure. The first 11 seconds of the shot records, where available, have been edited, stacked, deconvolved, filtered, and graphically displayed on an electrostatic plot. A trackline chart (1:500,000 scale) showing showing shotpoint navigation accompanies the seismic reflection data.

Because of delays in the final processing of the sections, the data will not be ready for distribution until early 1980. We regret the premature announcement of the data availability, and we apologize for the delay. When the data are available, they may be examined at USGS office, Room B-164, Deer Creek Facility, 345 Middlefield Road, Menlo Park, CA [contact Mr. Tom Chase at (415) 856-7132]. Copies of the data are available through the National Geophysical and Solar-Terrestrial Data Ctr., NOAA, Boulder, CO 80302. Telephone (303) 599-1000, ext. 6542.


USSR
ALASKA
BERING SEA
CONTINENTAL SLOPE
CONTINENTAL SHELF
St. Lawrence Island
St. Matthew Island
Nunivak Island
St. Paul Island
St. George Island
U.S.-Russia Convention of 1867
200
2800
14
15
13
12
9-10
8
7
6
5
4
64°
62°
60°
58°
56°
54°
162°
164°
166°
168°
170°
172°
174°
176°
178°E
180°
178°W
0 50 100 NM
0 100 KM