U.S. DEPARTMENT OF COMMERCE
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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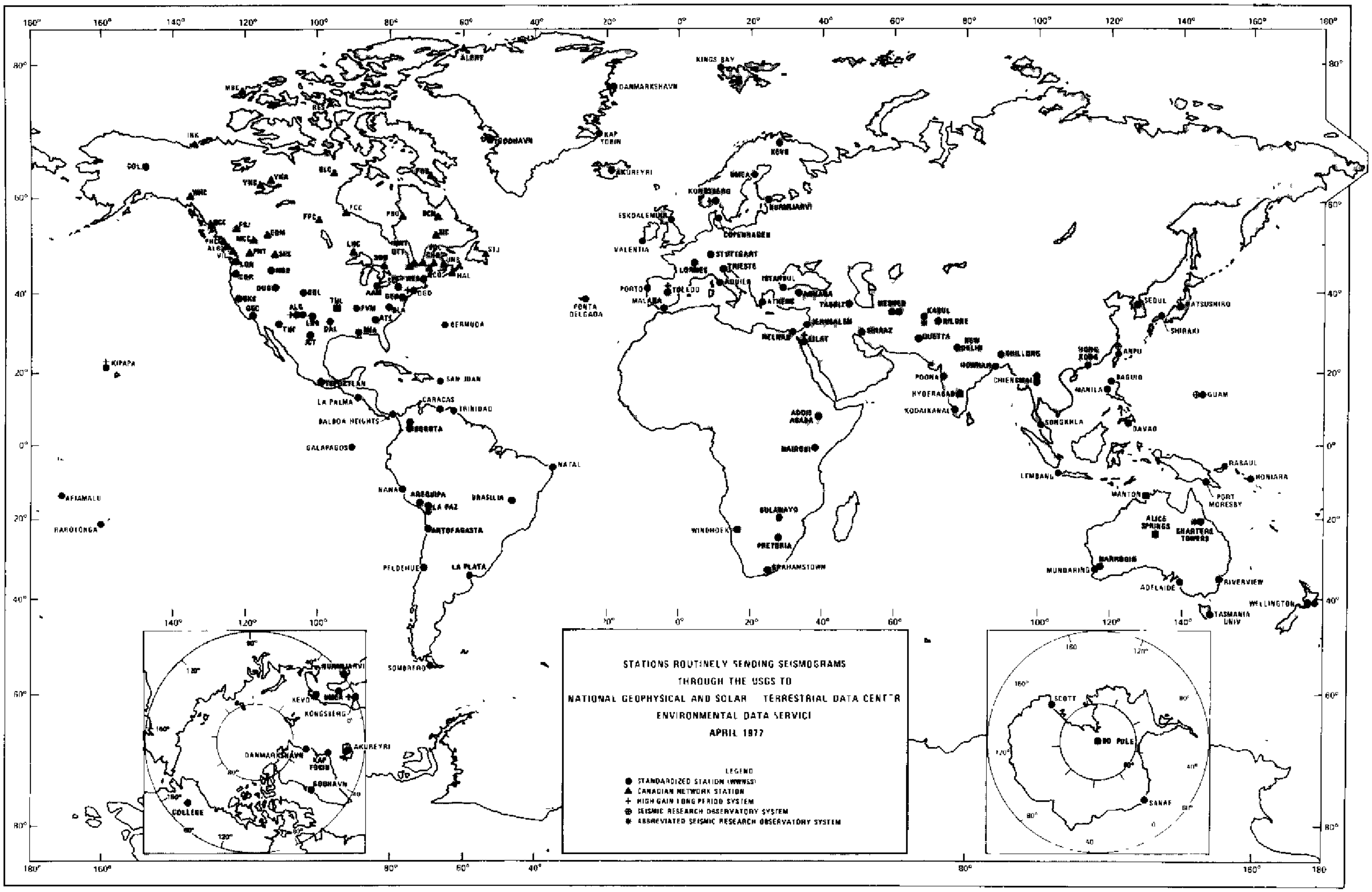
ENVIRONMENTAL DATA AND INFORMATION SERVICE
Thomas S. Austin, Director

EARTHQUAKE DATA SERVICES AND PUBLICATIONS

National Geophysical and Solar-Terrestrial Data Center
Boulder, Colorado
October 1978


STATIONS ROUTINELY SENDING SEISMOGRAMS
THROUGH THE USGS TO
NATIONAL GEOPHYSICAL AND SOLAR TERRESTRIAL DATA CENTER
ENVIRONMENTAL DATA SERVICE
APRIL 1977
LEGEND
STANDARDIZED STATION (WWNSS)
CANADIAN NETWORK STATION
HIGH GAIN LONG PERIOD SYSTEM
SEISMIC RESEARCH OBSERVATORY SYSTEM
ABBREVIATED SEISMIC RESEARCH OBSERVATORY SYSTEM

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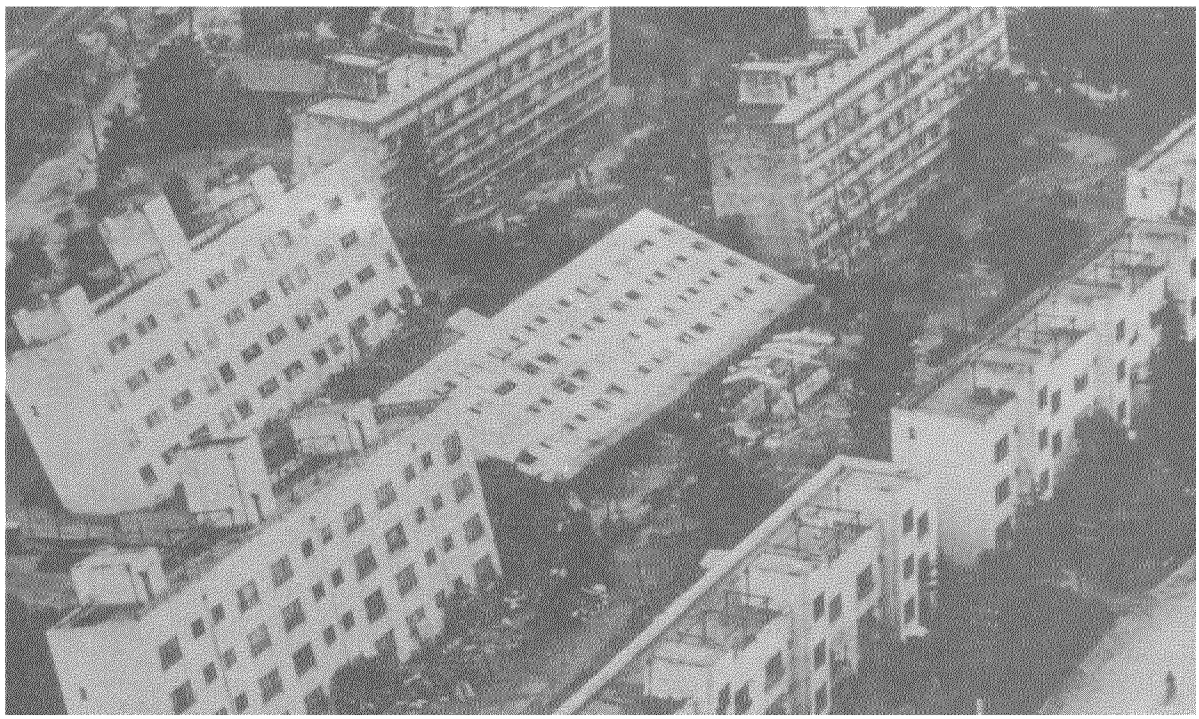
INTRODUCTION

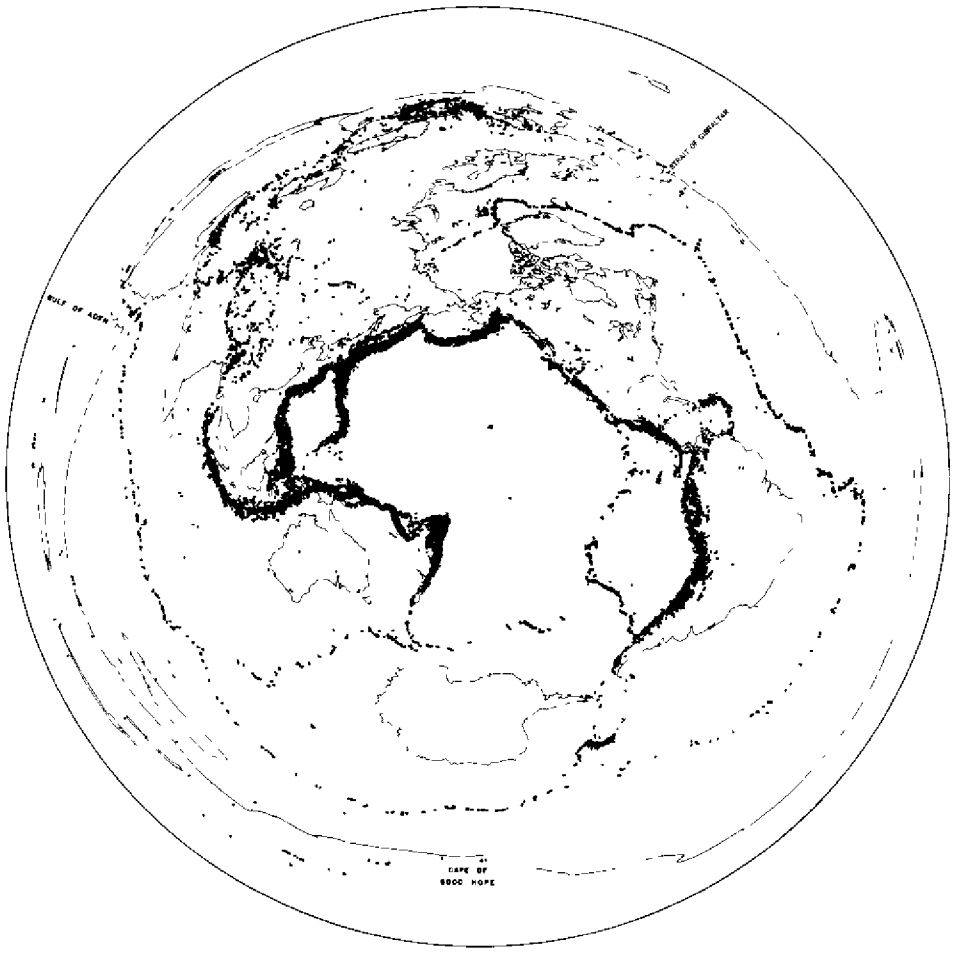
The National Oceanic and Atmospheric Administration (NOAA), an agency of the U.S. Department of Commerce, and its Environmental Data and Information Service (EDIS) have the role of collecting, managing, and disseminating the great mass of information produced by the scientific observation of interplanetary space and the physical world. Data activities in seismology, geomagnetism, marine geology and geophysics, geothermics, solar-terrestrial physics, and other related disciplines are directed by EDIS' National Geophysical and Solar-Terrestrial Data Center (NGSDC). This publication focuses on products and services in the field of *seismology*, the study of earthquake phenomena. It includes publications produced by NOAA, jointly with USGS, or by USGS.

NGSDC is a focal point for dissemination of earthquake data and information for both technical and general users, except for information on recently occurring earthquakes. The U.S. Geological Survey in Golden, CO, operates the National Earthquake Information Center, a service for rapid location of earthquakes and for gathering data about earthquakes. After initial distribution by USGS, this information is released to NGSDC for further distribution. NGSDC prepares seismic histories of local and regional areas; answers public inquiries on all aspects of noncurrent earthquakes; publishes historical compilations and annual earthquake summaries jointly with USGS; and makes available seismograms, strong-motion earthquake records, computer listings of earthquake locations, and other data in a variety of formats.

NGSDC operates World Data Center A for Solid Earth Geophysics, which includes seismology, tsunamis, gravimetry, Earth tides, recent movements of the Earth, rotation of the Earth, magnetic measurements, volcanology, geothermics, and paleomagnetism and archeomagnetism. Data are exchanged in this system as provided for by the Third Consolidated *Guide to International Data Exchange through the World Data Centres*, issued by the International Council of Scientific Unions, Panel on World Data Centres, December 1973.

Following are descriptions of seismology products and services, their costs, and where they may be obtained. Copies of primary data and of data products are available at the cost of copying or on an exchange basis. When ordering, please make check or money order payable to Commerce, NOAA, NGSDC unless otherwise indicated. All publications and services are available from NOAA/EDIS, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO 80303 unless otherwise indicated.





PACIFIC RING OF FIRE

Computer plot of earthquake epicenters on azimuthal equidistant projection. Plot includes epicenters (1963-73) with magnitude of 4.5 or greater and with locations determined by 10 or more stations. All distances from plot center are true.

DATA SERVICES

Regular Services

The following paragraphs describe the regular services provided by NGSDC. These include searches or copies of the earthquake data file, copies of seismograms and strong-motion records, photographs of earthquake damage, and intensity and seismicity maps.

The earthquake data file contains locations for over 136,000 earthquakes, known or suspected explosions and associated collapse phenomena, coal bumps, rockbursts, quarry blasts, and other earth disturbances recorded worldwide by seismographs from January 1900-77. The file has been assembled from data furnished by the U.S. Geological Survey (earlier Coast and Geodetic Survey and NOAA), California Institute of Technology (Pasadena), University of California (Berkeley), and other sources. Historical U.S. earthquakes are included for the period 1638-1899.

A data printout containing a file search can be provided for $25 per search (see example below). A search can be made for any: geographic area, time period from the year 1638, magnitude range, and for other parameters covered by the file. Among the parameters available for each event are date, origin time, geographic location, depth, magnitude, and intensity (Modified Mercalli). The complete file may be purchased on magnetic tape in two versions: 1) a chronological sort; 2) a geographical sort according to 10° Marsden Squares and subdivided into 1° Marsden Squares. The tape is available for $60 in 7- or 9-track mode, and in densities of 556, 800, or 1600 BPI. The data file also is available on 16-mm microfilm as follows. chronological sort (1 reel) for $20; geographical sort by Marsden Squares (2 reels) for $40 per set. Additionally, current data from the USGS *Preliminary Determination of Epicenters Monthly Listing* may be purchased on punched cards (on a monthly basis) for $100 per year; 12 months of data in one shipment costs $50. Special seismicity plots (see sample plots on pp. 2 and 7) of the data file can be furnished upon request. The price will be determined upon receipt of each request.

EARTHQUAKE DATA FILE

RADIUS SEARCH 150KM AROUND HELENA, MONTANA 46.60N, 112.00W

SOURCE	YEAR	MO	DA	HR	MN	SEC	LAT	LONG	DEPTH (KM)	MAGNITUDES BODY	MAGNITUDES SURF.	MAGNITUDES OTHER	MAGNITUDES LOCAL	INT MAP	INT MAX	PHENOM DTSVNO	RN	GE	Q/S	MAR	DG	DIST (KM)
EQH	1872	12	10	23	30	00.0Z	46.400N	112.500W							VI		456	F		156	62	44
EQH	1872	12	11	13	55	00.0Z	46.400N	112.500W									456	F		156	62	44
EQH	1904	08	04	03	00	00.0Z	45.500N	111.800W							V		456	F		156	51	123
EQH	1908	12	20	23	30	00.0Z	45.300N	111.900W							VI		456	D		156	51	144
C-R	1925	06	28	01	21	06.0	46.000N	111.500W				6.75PAS			VIII		456	D		156	61	77
EQH	1925	07	10	14	45	00.0Z	46.000N	111.200W							VI		456	F		156	61	90
EQH	1926	05	31	12	25	00.0Z	46.000N	111.400W							V		456	F		156	61	81
EQH	1926	12	13	00	**	00.0Z	46.100N	111.200W							V		456	F		156	61	83
USE	1928	02	29	22	38	00.0Z	46.500N	112.000W									456	F		156	62	11
USE	1928	06	24	18	55	00.0	46.500N	112.000W									456	F		156	62	11
USE	1929	02	15	03	00	00.0Z	46.100N	111.300W									456	F		156	61	77
USE	1929	05	31	12	30	00.0Z	46.500N	112.000W									456	F		156	62	11
USE	1929	06	11	12	00	00.0Z	45.900N	111.300W									456	F		156	51	94
USE	1930	03	16	12	54	00.0Z	46.500N	112.000W							VI		456	F		156	62	11
USE	1930	07	13	02	00	00.0Z	46.000N	112.000W									456	F		156	62	66
USE	1935	10	12	07	51	00.0	46.615N	111.966W							VII		456	D		156	61	3
G-R	1935	10	19	04	48	03.0	46.600N	112.000W				6.25PAS		USE	VIII		456	G		156	62	
G-R	1935	10	31	18	37	49.0	46.500N	112.000W				6.00PAS		USE	VIII		456	G		156	62	11
CGS	1935	11	28	14	41	54.0	46.600N	112.400W							VI		456	O		156	62	
CGS	1940	12	23	21	58	30.8	45.500N	112.500W							VI		456	D		156	52	128
CGS	1945	06	01	16	54	50.0	46.600N	112.000W							V		456	D		156	62	
USE	1947	12	17	12	38	00.0	46.900N	112.000W							V		456	F		156	62	11
USE	1950	08	20	01	44	55.0	47.250N	113.500W							VI		456	F		156	73	135
USE	1952	04	22	16	54	42.5	46.200N	111.400W							VI		456	F		156	61	64
CGS	1957	11	11	07	49	54.0	46.500N	112.000W									456			156	62	11
USE	1958	05	28	16	45	54.0Z	46.500N	113.000W						USE	VI	T	456	D		156	63	77
CGS	1958	10	13	09	00	22.4	47.000N	112.500W									456			156	72	58
USE	1959	05	17	10	56	52.0	47.500N	113.000W							V		456	F		156	73	125
CGS	1959	09	16	21	43	57.0	45.500N	111.000W									456			156	51	144
CGS	1959	12	18	09	11	55.0	45.500N	111.000W									456	F		156	51	144
CGS	1960	05	05	03	39	50.0	46.000N	111.500W									456	F		156	61	77
CGS	1963	02	16	03	01	41.8	46.100N	111.000W	033	4.50MB					V		456	F	021	156	61	95
CGS	1964	08	13	21	51	01.7	46.500N	112.200W	015	4.10MB					IV		456	F	006	156	62	18
CGS	1964	11	24	03	01	07.7	45.300N	111.700W	010	3.90MB					IV		456	F	008	156	51	146
CGS	1964	12	12	00	22	18.5	46.700N	112.800W	033								456		004	156	62	62
CGS	1964	12	22	15	45	28.3	45.400N	112.200W	033	4.00MB							456		005	156	52	134
CGS	1965	04	06	14	46	01.2	45.600N	111.900W	033	3.70MB					V		456	F	005	156	51	111
CGS	1965	04	13	07	59	01.8	46.900N	113.100W	033	4.00MB							456		006	156	63	90