UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL DATA SERVICE
National Geophysical and Solar-Terrestrial
Data Center
Boulder, Colorado 80302

1977 (N-N)

SEISMOLOGICAL DATA FROM THE PEOPLE'S REPUBLIC OF CHINA

Several items of seismological data from the People's Republic of China are available from this Center. These include reports given to members of the American Delegation of Seismologists who visited there in October 1974, data individually requested from the Academia Sinica by American scientists, reports sent regularly to the Center on an exchange basis by the Academia Sinica, and special research projects. These are available as described below.

(1) *Preliminary Seismological Report of the Central Station, Peking, and Auxiliary Stations* (1960-65 inclusive). Earthquake arrival times and epicenters recorded at as many as 13 stations in the People's Republic of China. Station locations and standard instrumental response characteristics are listed. About 950 pages. Available on 16-mm microfilm or microfiche from mimeograms of varying quality, but all legible. In English. Price $10.

(2) *Chinese Seismological Station Reports* (1971, 1972, and 1973), *Seismological Bulletin of Chinese Stations* (1974). Earthquake arrival times and epicenters recorded at as many as 17 stations in the People's Republic of China. Also a list of stations and plots of instrumental characteristics. About 250-400 pages in each bulletin. Available on 16-mm microfilm or microfiche. Some Chinese text. Price $10.

(3) *Monthly Earthquake Observation Report for Peking Station.* Lists phase arrival times and magnitudes. Issues from January 1975 to near-current are availavailable in zerographic copies. About 4 pages each month. Price $0.30 per page.

(4) *Catalog of Chinese Earthquakes.* Published in 1970. In two parts--part one covering 1177 B.C. to 1900 A.D. and part two covering 1901 A.D. to 1949 A.D. Dates, epicenters, magnitudes, intensities at various locations, descriptive material on damage and effects, and isoseismal sketches. Text in Chinese. 359 pages. Available on 16-mm microfilm or microfiche. Price $10. Title page, table of contents and preface translated. Full translation is under consideration by American Geophysical Union. Original document is on deposit at the Library of the East Asian Research Center, Harvard University.

(5) Punched cards containing data from the catalog cited above are available for $10 for each of the parts (part two has been augmented with new and revised data through 1976) or $15 for both parts. Complete descriptions of these expanded catalogs and the format for the punched cards are contained in "A Catalog of Historical Earthquakes in China" by W.H.K. Lee, F.T. Wu, and Carl Jacobsen, *Bulletin of the Seismological Society of America,* vol. 66, no. 6, December 1976,

(over)

pp. 2003-2016, and "A Catalog of Instrumentally Determined Earthquakes in China (Magnitude >6) Compiled from Various Sources" by W.H.K. Lee, F.T. Wu, and S.C. Wang, *Bulletin of the Seismological Society of America*, vol. 68, no. 2, April 1978.

(6) Copies of seismograms for stations in the People's Republic of China. Earthquakes of November 8 and 18, 1971. Twelve station days, three components each. Stations are Peking, Paotow, Lhasa, Nanking, Seh-shan, Wuchang, Urumchi, and Sian. All stations are not available for each earthquake. Detailed list on request. Available on 35-mm microfilm, but quality only fair. Price $5.50 for set.

Further information on these data may be obtained from Carl von Hake, NGSDC, telephone (303) 499-1000, extension 6472 FTS 323-6472. Orders may be sent to NOAA, Environmental Data Service, NGSDC - Code D62, Boulder, CO 80302, USA.

Checks should be made payable to "Commerce/NOAA/NGSDC." A minimum order of $10 is required unless special arrangements are made.

WORLD DATA CENTER A
for
SOLID-EARTH GEOPHYSICS

SEISMOLOGY; TSUNAMIS;
GRAVIMETRY; EARTH TIDES.
RECENT MOVEMENTS OF THE
EARTH S CRUST;
MAGNETIC MEASUREMENTS
PALEOMAGNETISM AND
ARCHEOMAGNETISM;
VOLCANOLOGY, GEOTHERMICS

Environmental Data Service
National Oceanic and Atmospheric Administration
Boulder, Colorado 80302 U S A

IN REPLY ADDRESS
WDC-A FOR SOLID-EARTH GEOPHYSICS
ENVIRONMENTAL DATA SERVICE NOAA
BOULDER COLORADO 80302 U S A.
TELEPHONE (303) 499-1000 EXT 6521
CABLE ADDRESS SOLTERWARN

IN REPLY REFER TO
1975 (W)

TWO SPECIAL SEISMOGRAM SERVICES FOR LARGE EARTHQUAKES

As a result of economy in making multiple copies of high use data sets, two special seismogram microfilm services presently are being offered at reduced cost by this Center. First, microfilm copies of seismograms from stations participating in the World Data Center International Data Exchange program are available for days when qualifying earthquakes have occurred. Second, microfilm copies of seismograms from stations whose daily records are routinely copied by the Center are available for days when earthquakes of magnitude 6.5 to 7.4 occurred as a Network-Day service. Copies of seismograms for other days are available at usual prices. Both services begin with data from January 1, 1974.

INTERNATIONAL DATA EXCHANGE SERVICE

The International Data Exchange (IDE) seismogram package is being offered under the provisions of the ICSU *Guide to International Data Exchange through the World Data Centres*. For earthquakes of magnitude (M) 7.5 or larger, and for others designated as special interest, seismograms from stations which participate in the exchange can be ordered from World Data Center-A. Seismograms presently are being collected from approximately 290 stations in 69 geographical areas, including the USSR, for three 1974 earthquakes and for five or more events in 1975. These IDE earthquakes have been identified in the U.S. Geological Survey *Preliminary Determination of Epicenters* reports and elsewhere, and are listed on page 2 of this announcement. To make IDE records quickly available for research studies, WDC-A is prepared to provide immediate copies of the records now on hand for these earthquakes and to send additional records to subscribers as they become available. Therefore, subscribers can expect to receive periodic shipments (approximately once a month or less) of seismograms for up to a year, at which time about 150 to 200 stations will have become available.

The Guide provides that each World Data Center to the extent possible shall give to each contributor a body of data equivalent to that received. Initially we will consider this to be a set of data for one IDE earthquake per year which WDC-A will provide on request to each contributor of seismograms under this exchange provision without charge.

International Data Exchange earthquakes identified through November 1975:

Date 1974	Time (UT)	Geographic area	Depth km	Magnitude M
May 10	19:25:15.0	Szechwan Province, China. .	11	6.8
Oct. 3	14:21:29.1	Near coast of Peru.	13	7.6
8	09:50:58.1	Leeward Islands	47	7.5
1975				
Feb. 2	08:43:39.1	Near Islands, Aleutian Is.	10	7.6
May 10	14:27:37.2	Southern Chile.	2	7.8
26	09:11:49.8	North Atlantic Ocean. . . .	33	8.0
July 20	14:37:35.8	Solomon Islands	33	8.0
Oct. 11	14:35:20.3	Tonga Islands region. . . .	33	7.5
Nov. 29	14:47:40	Hawaii.	5	7.2

NOTE: For those who are interested in all 1976 IDE events, a blanket request would assist WDC-A in expediting the order.

Seismograms for these earthquakes will be available on 70-mm chips and 35-mm microfilm rolls only. Because of the technicalities involved, approximately 15% of the records for an earthquake will be available only on 35-mm film. Price per earthquake for the IDE package is $130.

NETWORK-DAY SERVICE

Seismograms of earthquakes of magnitude (M) 6.5 to 7.4 are available under this plan. The collection will consist of copies of seismograms from the 115-station Worldwide Standard Seismogram Network (WWNSS). Also available upon request are records from the 10-station high-gain long-period net (HGLP), and the 30-station Canadian seismic net. Usually, there are six seismograms (three short-period and three long-period) per station.

The first shipment of microfilms of seismograms for a current Network-Day will be sent when records from approximately 40 WWNSS stations have been processed; the second and final shipment will be made when records from about 40 more WWNSS stations are available. The first shipment can be expected within 6 months after the earthquake, and the second and final shipment within a year. Requests for earlier network days may be sent in one shipment. In general, records from approximately 80 stations become available for a Network-Day package within one year for current earthquakes, although the total number will vary according to the response of the stations. Additional records may have accumulated for earlier Network-Days (1974) and will be made available at no extra charge.

Prices per event for the Network-Day Package are as follows:

	WWNSS	HGLP	Canadian
35-mm roll	$60	$6	$18
70-mm roll	65	6.50	--
70-mm chip	70	7	--
70-mm chip (in jackets)	85	8.50	--

Please make check or money order payable to NOAA/EDS/NGSDC. Orders, and requests for additional information, should be directed to:

National Geophysical and Solar-Terrestrial Data Center (D62)
NOAA/EDS
Boulder, CO 80302

Telephone: 303 499-1000, Ext. 6513

Qualifying earthquakes for the Network-Day Package identified through April 1975:

Date 1974	Time (UT)	Geographic area	Depth km	Magnitude M
Jan. 2	10:42:29.9	Northern Chile	105	6.8
5	08:33:50.7	Near coast of Peru	98	6.6
10	08:51:13.3	New Hebrides Islands	34	7.2
31	23:30:05.3	Solomon Islands	34	7.0
Feb. 1	03:12:33.1	... do	40	7.1
6	04:04:07.2	Unimak Island region	2	6.5
22	00:36:53.8	Near coast of Honshu, Japan	385	6.5
Mar. 9	20:14:28.3	Solomon Islands	50	6.5
9	20:18:06.3	... do	33	6.6
Apr. 27	06:01:47.3	Southern Peru	113	6.5
May 8	23:33:25.2	Near coast of Honshu, Japan	2	6.5
10	08:12:05.0	Northern Easter I. Cordillera	33	6.5
11	06:14:08.6	Mariana Islands	6	6.8
15	18:59:55.9	Kuril Islands	56	6.5
June 4	04:14:15.9	Tonga Islands	276	6.7
12	16:25:47.6	Near coast of Venezuela	34	6.5
19	02:55:19.7	Atlantic-Indian Rise	33	6.6
25	17:22:19.3	South Indian Ocean	33	6.6
July 1	16:51:51.5	Salta Province, Argentina	13	6.5
2	23:26:26.6	Kermadec Islands	33	7.3
3	23:25:09.3	... do	33	6.6
4	19:30:42.1	Mongolia	33	6.7
13	01:18:22.8	Panama-Colombia border	12	7.3
30	05:12:40.6	Hindu Kush	211	7.4

Date 1974	Time (UT)	Geographic area	Depth km	Magnitude M
Aug. 11	01:13:55.5	Tadzhik-Sinkiang border	9	7.3
18	10:44:12.8	Near coast of central Chile	36	7.1
Sep. 7	20:43:11.5	South of Java	33	6.6
27	05:47:29.4	Kuril Islands	43	6.7
Oct. 9	07:32:02.2	Kuril Islands region	49	6.7
16	05:45:09.8	North Atlantic Ocean	33	7.3
21	04:12:29.4	Fiji Islands	602	6.6
23	06:14:54.0	Déntrecasteaux Islands	48	7.2
29	03:14:14.6	Banda Sea	117	6.6
Nov. 9	12:59:49.8	Near coast of Peru	6	7.2
20	04:14:46.9	New Hebrides Islands	33	6.9
29	22:05:22.4	South of Honshu, Japan	419	7.4
Dec. 3	03:06:35.2	Banda Sea	33	6.5
4	03:07:46.3	Northern Sumatra	20	6.9
24	06:55:47.1	Southern Sumatra	33	6.8
1975				
Jan. 14	19:48:59.2	Banda Sea	33	6.9
19	08:02:02.5	Kashmir-Tibet border	33	6.8
25	02:08:41.5	Panama-Colombia border	36	6.7
Feb. 4	11:36:07.5	Northeastern China	33	7.4
22	08:36:07.4	Andreanof Is., Aleutian Is.	48	6.5
22	22:04:37.7	South of Fiji Islands	375	6.7
Mar. 5	00:22:19.7	Ceram Sea	33	6.9
13	15:26:42.5	Near coast of central Chile	4	6.9
18	17:21:23.4	Northern Peru	98	6.5
27	05:15:06.2	Turkey	5	6.7
Apr. 16	01:27:18.7	Jan Mayen Island	13	6.5
20	11:40:39.9	Southern Pacific Ocean	33	6.5
23	11:14:48.0	Near coast of Guerrero, Mexico	11	6.5

WORLD DATA CENTER A
for
SOLID-EARTH GEOPHYSICS

SEISMOLOGY; TSUNAMIS; GRAVIMETRY, EARTH TIDES, RECENT MOVEMENTS OF THE EARTH'S CRUST, MAGNETIC MEASUREMENTS PALEOMAGNETISM AND ARCHEOMAGNETISM; VOLCANOLOGY; GEOTHERMICS

Environmental Data Service
National Oceanic and Atmospheric Administration
Boulder, Colorado 80302 U. S. A.

IN REPLY ADDRESS
WDC-A FOR SOLID EARTH GEOPHYSICS
ENVIRONMENTAL DATA SERVICE, NOAA
BOULDER, COLORADO 80302 U S A.
TELEPHONE (303) 499-1000 EXT 6521
CABLE ADDRESS SOLTERWARN
IN REPLY REFER TO D62

SPECIAL NOTICE--Tsunami Data 1975 (T)

Recently, the WDC-A activity for tsunami data has been relocated to Boulder, Colorado, and is now part of WDC-A for Solid-Earth Geophysics. All inquiries relating to tsunami data or services provided by WDC-A should be sent to the above address.

In the December 1973 revised ICSU *Guide to International Data Exchange through World Data Centres* the wave height criterion for exchange of mareographic data was changed to include all records with perceptible activity. A copy of the portion of the Guide that pertains to tsunamis is reproduced on the following pages. Prior to this, the wave height criterion was for the exchange of mareographic data when a wave of at least two meters was detected at any station. The new 1973 criterion will considerably expand the data base in the exchange system.

When the data recommended for exchange under the Guide have all been received at the WDCs, the archive will contain mareograms from 43 stations and seismograms from up to 13 stations for 26 events, 1957-1974. Copies of these data are available for users for the cost of copying, or on an exchange basis. In addition, WDC-A undertakes to assist users in obtaining copies of data from other stations or for other events in accordance with the general provisions of the Guide. However, at the present time, the tsunami data archives at WDC-A are incomplete, but active steps are being taken to obtain the full data with the cooperation of participants. It is also hoped that meaningful data beyond that called for in the Guide will be located. It is planned to publish a detailed catalog of WDC-A tsunami data later in 1975.

Following is the list of tsunamigenic earthquakes and maximum recorded wave heights (1957-1974) which meet the criterion for data exchange through WDCs:

EARTHQUAKE EPICENTER							MAXIMUM TSUNAMI	
year	mo	da	hr (UT)	mn	lat long	mag	ht	location
1957	03	09	14	22	51.3N-175.8W	8.30	12m	Unimak, Aleutian Is.
	07	28	08	40	17.1N-099.1W	7.90	2.5m	Acapulco, Mexico
1958	07	10	06	16	58.6N-137.1W	7.90	30m	Lituya Bay, Alaska*
1960	05	22	19	11	39.5S-074.5W	8.50	20m	Isla Mocha, Chile
1963	10	13	05	18	44.8N-149.5E	8.25	5m	Kuril Islands
	10	20	00	53	44.7N-150.7E	6.90	15m	Kuril Islands
1964	03	28	03	36	61.0N-147.8W	8.50	30m	Naval Station, Kodiak I., Alaska
	06	16	04	02	38.3N-139.1E	7.50	5.8m	Niigata Prefecture, Japan
1965	02	04	05	01	51.3N-178.6E	7.75	11m	Shemya, Alaska
	08	11	22	32	15.8S-167.2E	7.38	2.5m	Tongoa, New Hebrides Islands
1966	10	17	21	42	10.7S-078.7W	7.5	3.5m	La Punta-Callao, Peru
	12	31	18	23	11.8S-166.5E	7.7	2m	New Hebrides Islands
1968	04	01	00	42	32.5N-132.2E	7.5	2.3m	Aburatsu, Japan
	05	16	00	48	40.8N-143.2E	7.9	4.7m	Miyako, Japan
	08	14	22	14	00.2N-119.8E	7.4	10m	Mapaga, Indonesia
	09	03	08	20	41.8N-032.3E	5.7	3m	Big Port at Amasra, Turkey**
1969	02	23	00	37	03.1S-118.9E	6.90	4m	Celebes
	08	11	21	27	43.5N-147.4E	7.80	2.6m	Nemuro, Japan
1971	07	14	06	11	06.5S-153.9E	7.90	3.1m	New Ireland
	07	26	01	23	04.9S-153.2E	7.90	6.5m	New Ireland
	12	15	08	30	56.0N-163.3E	7.80	10m	Kuril Islands
1973	06	17	03	55	43.2N-145.8E	7.70	3m	Nemuro, Japan
1974	01	31	23	30	07.5S-155.9E	7.0	1.6m	Shortland Islands
	02	01	03	12	07.4S-155.6E	7.1	4m	Choiseul Island, Shortland Is.
	09	27	05	47	43.2N-146.7E	6.7	0.4m	Hanasaki, Japan
	10	03	14	21	12.3S-077.8W	7.6	1.8m	Callao, Peru

*Generated by large landslide in Gilbert Bay and resulted in a runup height of 525 m on opposite side of fjord.

**Atlantic tsunami. Not covered by Tsunami Warning System.

ICSU Panel on World Data Centres
(Geophysical and Solar)

GUIDE TO INTERNATIONAL DATA EXCHANGE

through the

WORLD DATA CENTRES

TSUNAMIS

---

1. World Data Centres

A. World Data Center A for Solid Earth Geophysics
Environmental Data Service
National Oceanic and Atmospheric Administration
Boulder, Colorado 80302 USA

B. World Data Center B
Molodezhnaya 3
Moscow 117 296, USSR

2. Types of Observations

2.1 Observations of earthquakes that cause tsunamis

2.2 Observations of sea level in connection with tsunamis

3. Description and Form of Presentation of Data to the WDCs

For the purpose of routine exchange of tsunami data through the WDCs, certain stations, both seismographic and mareographic, have been designated the "WDC Tsunami Network". The lists of these stations appear in sections 6 and 8 of this Guide. A list of additional contributing seismographic stations appears in section 7.

3.1 Seismographic data

3.1.1 From stations in the Tsunami Network: seismograms of earthquakes associated with Tsunamis.

3.1.2 From additional contributing stations upon the request, through one of the WDCs, of investigators studying these earthquakes: copies of seismograms of earthquakes of interest in connection with tsunamis.

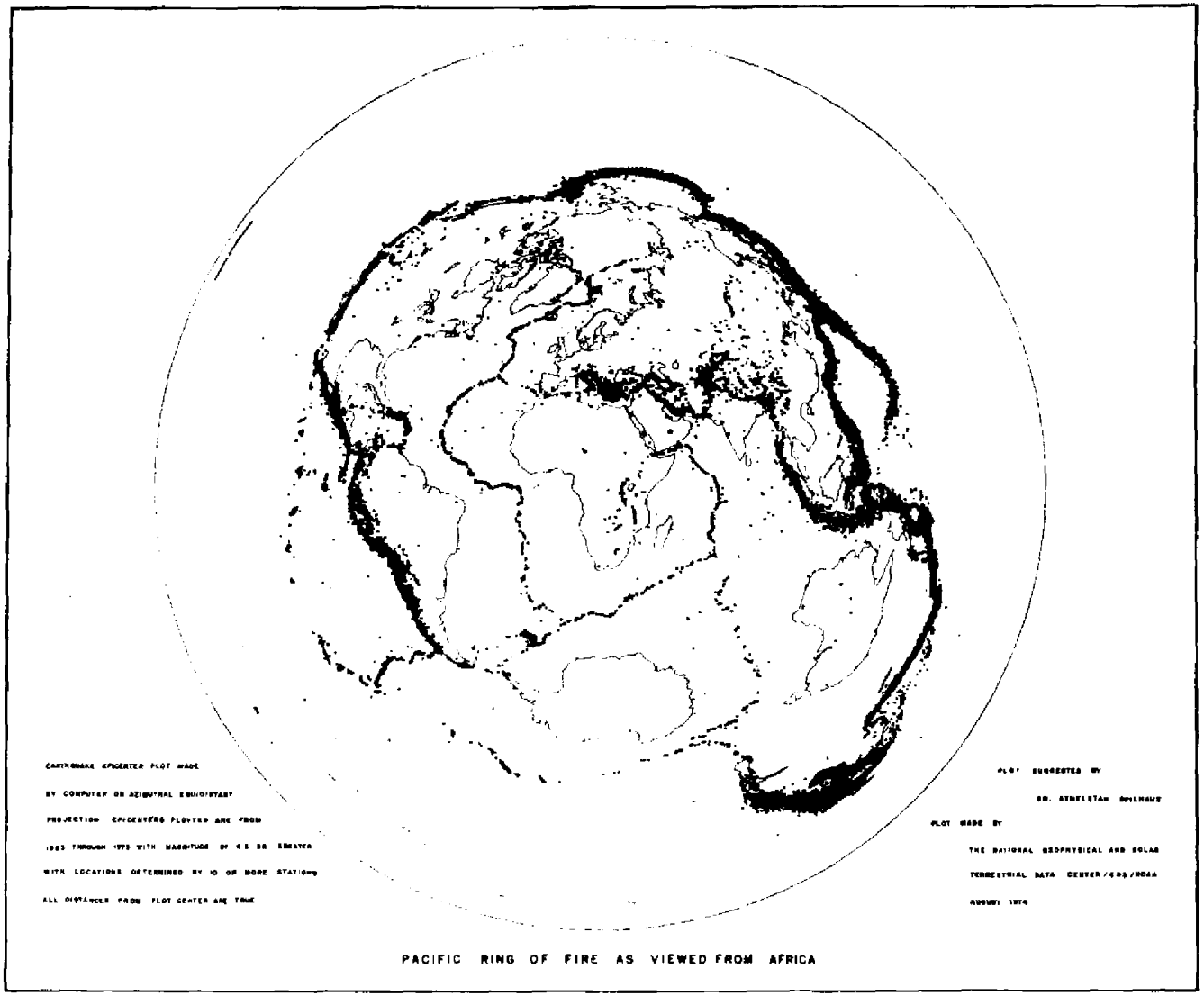
3.2 Mareographic data

3.2.1 From any station: notification of the occurrence of tsunami having a perceptible height. This will initiate a request by the WDC for an examination of all contributing stations.

3.2.2 For stations whose records show a perceptible tsunami height: copies of mareograms showing a tsunami for a period of 7 hours before and continuing for the entire period in which the tsunami is detectable.

3.2.3 For stations whose records do not show a perceptible tsunami height: a negative report listing the station whose mareographic records have been examined over the period 7 hours before and 70 hours after the time at which a known tsunami would have reached the station and indicating that no preceptible evidence has been found of a tsunami. The negative report should always include an estimated range of noise level for the time period examined.

This Guide for Tsunamis was prepared by the IUGG Tsunami Committee and was approved by that Committee at its meeting in Moscow on 10 August 1971.



PACIFIC RING OF FIRE AS VIEWED FROM AFRICA

SOURCE	YEAR	MO	DA	HR	MN	SEC	LAT	LONG	DEPTH (KM)	MAGNITUDES BODY	SURF.	OTHER	LOCAL	INT MAP	INT MAX	PHENOM DTSVNO	RN	CE	Q/S	MAR	DG	DIST (KM)
CGS	1968	02	03	16	31	12.9	46.000N	112.600W	033	3.90MB							456		007	156	62	81
CGS	1968	02	05	17	08	31.3	46.200N	111.400W	005	3.80MB							456		006	156	61	64
CGS	1968	02	06	14	29	33.4	45.800N	112.000W	033	3.70MB							456		005	156	52	88
CGS	1968	04	20	02	35	46.6	47.100N	113.000W	033	4.10MB							456		005	156	73	94
CGS	1968	11	21	01	06	47.3	47.310N	112.756W	033N	3.80MB							456		007	156	72	97
CGS	1969	02	16	21	07	18.2	46.157N	112.556W	021	3.60MB							456		006	156	62	65
USE	1969	05	01	03	10	23.8	46.700N	112.800W	033N	3.90MB			3.80MLCGS		V		456	F	008	156	62	62
CGS	1969	09	24	15	46	15.2*	45.580N	112.052W	022	4.00MB							456		006	156	52	113
CGS	1969	12	29	05	20	13.7	47.325N	113.072W	033N	4.30MB							456	F	007	156	73	114
USE	1970	06	26	01	26	44.6	45.600N	111.800W	026	4.90MB					V		456	D	009	156	51	112
USE	1970	10	18	20	06	32.6	46.200N	111.500W	015G	4.30MB					V		456	F	022	156	61	58
NOS	1970	11	15	02	39	27.8*	46.898N	113.338W	015G								456		005	156	63	106
NOS	1971	01	26	10	52	52.7*	46.429N	112.204W	015G								456	F	005	156	62	25
NOS	1971	06	28	12	39	22.5*	45.803N	112.603W	005G								456		006	156	52	108
ERL	1972	11	02	03	41	31.3	46.147N	111.497W	005G	4.20MB			4.50MLERL				456	F	009	156	61	64
ERL	1972	11	02	07	27	52.0	46.165N	111.424W	005G				3.50MLERL				456	F	006	156	61	66
ERL	1972	11	02	10	40	52.4	46.164N	111.479W	005G				3.50MLERL				456	F	007	156	61	63
ERL	1973	01	05	12	35	56.5*	46.465N	112.727W	005G								456		010	156	62	57

THIS RUN CONTAINS 64 HITS

PREPARED BY THE NATIONAL GEOPHYSICAL AND SOLAR-TERRESTRIAL DATA CENTER

ENVIRONMENTAL DATA SERVICE----------NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOTE: A full description of the data appearing in the Earthquake Data File accompanies the printout of each search. Following are brief definitions of some of the column heads and abbreviations in the sample above

SOURCE: Source of the epicenter calculation.
EQH = Earthquake History of the U.S., Pub. 41-1
CGS = Coast and Geodetic Survey.
USE = United States Earthquakes annual report.
G-R = Gutenberg-Richter.
NOS = National Ocean Survey.
ERL = Environmental Research Laboratories.

SEC: Z = Noninstrumental location.
* = Epicenter determined from incomplete data.

MAGNITUDES: BODY = Body-wave magnitude (MB), as determined by USGS and predecessor agencies.
SURF = Surface-wave magnitude (MS).
OTHER = Magnitudes from other institutions (e.g., PAS = California Institute of Technology, Pasadena, Calif.).
LOCAL = Magnitude (ML) for local earthquakes, and the source as defined above.

INT MAP: Intensity (isoseismal) map is available and, if so, where.
USE = United States Earthquakes annual report.

INT MAX: Maximum intensity reported.

PHENOM: Phenomena reported. D = damage; T = tsunami, V = volcanism;
DTSVNO N = nontectonic; O = waves generated.

RN: Geographic region number according to E A. Flinn, E.R. Engdahl, and A. Hill in "Seismic and Geographic Regionalization," BSSA, Vol. 64, No. 3, Part II.

CE: Cultural effects.
F = Felt.
D = Damage.

Q/S: Epicenter quality: number of stations used in determining epicenter.

MAR DG: Marsden/Degree Square.
Numbering system dividing the world into 10° squares (MAR) and subdivided into 1° squares (DG).

DIST: Radial distance from epicenter to point of interest.

EARTHQUAKE DATA FILE

RADIUS SEARCH AROUND HELENA, MONT. (46.60N, 112.00W) 150KM

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	CE	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			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	F		156	51	144
G-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	44	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	46.616N	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	C		156	62	
G-R	1935	10	31	18	37	49.0	46.500N	112.000W				6.00PAS		USE	VIII		456	C		156	62	11
CGS	1935	11	28	14	41	54.0	46.600N	112.000W							VI		456	D		156	62	
CGS	1940	12	23	21	50	30.0	45.500N	112.500W							VI		456	D		156	52	128
C$S	1945	06	01	16	54	50.0	46.600N	112.000W							V		456	D		156	62	
USE	1947	12	17	12	38	00.0	46.500N	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	54.0	46.500N	113.000W						USE	VI		456	D		156	63	77
CGS	1958	10	13	09	00	22.0	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	41.0	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	01.0	46.900N	113.100W	033	4.00MB							456		006	156	63	90
CGS	1965	06	07	17	59	15.7	46.900N	113.200W	033								456		005	156	63	97
CGS	1965	08	29	03	00	19.7	45.700N	111.600W	017	3.70MB							456			156	51	104
CGS	1965	09	13	21	18	34.4	45.400N	111.800W	025	3.60MB							456		005	156	51	134
CGS	1965	10	26	11	28	04.1	47.400N	113.200W	032	4.00MB					V		456	F	013	156	73	127
CGS	1966	03	07	18	09	42.6	46.300N	111.500W	013	4.80MB				USE	V		456	F	031	156	61	50
CGS	1966	09	19	10	06	42.5	45.900N	111.200W	007	4.40MB					V		456	F	020	156	51	99
CGS	1967	02	09	13	16	57.4	46.245N	111.374W	019	3.90MB							456		006	156	61	62
CGS	1967	02	28	19	52	48.9	46.610N	112.336W	033N								456	F	006	156	62	25

03/25/75

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL DATA SERVICE
National Geophysical and Solar-Terrestrial Data Center (D62)
Boulder, Colorado 80302

April 1975

1975(Q)

Automated Earthquake Data File

NGSDC's Earthquake Data File contains data on earthquakes throughout the world for the period 1900 to 1974*. Historical U.S. earthquakes are included for the period 1638-1899. It contains over 105,000 locations of earthquakes, known or suspected explosions and associated collapse phenomena, coal bumps, rockbursts, quarry blasts, and other earth disturbances recorded worldwide by seismographs.

SERVICES

Searches of the entire file may be made of the following parameters, singly or in combination: date, origin time, geographic location, depth, magnitude, intensity, and others.

(1) A computer printout of a file search can be provided for $10 per search (see sample on page 2). For example, a search can be made for all events within a 50-km radius of 60° N., 150° W., or for all magnitude 5 and above earthquakes in the area bounded by 10°-20° N., 60°-70° W.

(2) The complete file may be purchased on magnetic tape for $60 in either of two versions. 1) a chronological sort; 2) a geographical sort according to 10° Marsden Squares and subdivided in 1° Marsden Squares. The tape can be furnished in 7-track or 9-track mode, 556, 800, or 1600 bpi.

(3) The complete data file also is available on 16-mm microfilm for $20.

(4) Current data may be purchased on punched cards on a monthly basis at $100 per year or at $50 for 12 months of data (any year) in one shipment.

(5) Special seismicity plots of the data file can be furnished upon request. The price, based upon the computer time involved, will be determined upon receipt of each request (see sample plot on page 4).

Checks or money orders should be made payable to NOAA/EDS/NGSDC. Inquiries should be addressed to: NGSDC, Code D62, EDS/NOAA, Boulder, CO 80302. Phone: (303) 499-1000, ext. 6472, FTS Phone: (303) 499-6472.

---

* The Earthquake Data File has been compiled from many sources, including the *Preliminary Determination of Epicenters* program operated by U.S. Department of Commerce Coast and Geodetic Survey and its successor National Ocean Survey, the Environmental Research Laboratories, and more recently the U.S. Geological Survey; California Institute of Technology, University of California at Berkeley; Gutenberg and Richter *(Seismicity of the Earth); International Seismological Summary;* and others.

8. WDC Tsunami Network -- Mareographic

CANADA		
Bella Bella	52°09.80'N	128°08.40'W
Langara Point	54°15'N	133°02'W
Port Hardy	50°43.00'N	127°29.00'W
Prince Rupert	54°18.90'N	130°19.70'W
Queen Charlotte City	53°15.00'N	132°04.00'W
Tofino	49°09.30'N	125°54.50'W
Victoria	48°25.47'N	123°22.17'W
CHILE		
Valparaiso	33°02'S	71°38'W
JAPAN		
Aburatsu	31°35'N	131°25'E
Ayukawa	38°18'N	141°31'E
Hanasaki	43°17'N	145°35'E
Kushimoto	33°28'N	135°46'E
Mera	34°55'N	139°50'E
Minamitori Shima	24°17'N	153°58'E
Miyako	39°38'N	141°58'E
Shimizu	32°47'N	132°58'E
Toba	34°29'N	136°51'E
USA		
Adak, Sweeper Cove	51°51'N	173°38.6'W
Attu	52°50'N	173°12'E
Cold Bay	55°12'N	162°42'W
Crescent City	41°45'N	124°12'W
Hilo, Hawaii	19°44'N	155°03'W
Honolulu	22°18.5'N	157°52.0'W
Johnson Island	16°44.7'N	169.31.0'W
Kwajalein Island	8°44.0'N	167°44.0'E
Los Angeles Outer Harbor	33°43.2'N	118°16.3'W
Malakal Island	7°20'N	134°28'E
Midway Island	28°13'N	177°22'W
Moen Island	7°27'N	151°51'E
Nawiliwili Bay, Hawaii	21°58'N	159°22'W
Neah Bay	48°22.0'N	124°37.0'W
Pago Pago	14°16.6'S	170°40.7'W
San Diego Bay	32°42.8'N	117°10.4'W
San Francisco, Presidio	37°48.4'N	122°27.9'W
Seward	60°07'N	149°26'W
Shemya	52°44'N	174°04'E
Sitka	57°02.9'N	135°20.3'W
Unalaska	53°24.5'N	166°32.3'W
Wake Island	19°17.4'N	166°37.3'E
Womans Bay, Kodiak	57°43.4'N	152°31.2'W
Yakutat	59°32.8'N	139°44.0'W
USSR		
Petropavlovsk-on-Kamchatka	53°01'N	158°39'E
Yuzhno-Kurilsk	44°01'N	145°49'E

3.2.4 On a voluntary basis: any available tsunami tide gauge data in digitized format. A digitized time interval of one minute is suggested, but records digitized at other intervals according to contributor practices are acceptable and welcomed.

3.3 Station descriptions

The WDCs should be supplied with the descriptions of stations and equipment with all information necessary for the scientific analysis of data. This information shall be renewed when appropriate

4. Time Schedule for Data Presentation

4.1 Seismographic data

4.1.1 Data from the Tsunami Network are transmitted within three days after the occurrence of the earthquake.

4.1.2 Data from additional stations are sent within three months after receipt of a request forwarded through the WDCs (cf. section 3.1.2).

4.2 Mareographic data

4.2.1 Notification of occurrence of tsunami is sent within three days after the occurrence of the tsunami (cf. section 3.2.1).

4.2.2 Data and/or negative reports from the network stations are sent within three months after the WDC request (cf. sections 3.2 2 and 3.2.3).

4.2.3 Tsunami data in digitized format whenever available.

5 Collection of Publications

Scientific research institutes or national committees will send to the WDCs three copies of their publications not later than a month after they are issued.

6. WDC Tsunami Network -- Seismographic

Station	Geographical Coordinates	
CHILE		
Santiago	33°26'S	70°38'W
JAPAN		
Matsushiro	36°32.3'N	138°12.5'E
USA		
Honolulu, Hawaii	21°18'N	158°06'W
Tucson	32°14'N	110°50'W
USSR		
Petropavlovsk-on-Kamchatka	53°01'N	158°39'E
Yuzhno-on-Kamchatka	47°01'N	142°43'E

7. WDC Additional Contributing Seismographic Stations

Station	Geographical Coordinates	
JAPAN		
Nagasaki	32°43.9'N	129°52.2'E
Nemuro	43°19.7'N	145°35.2'E
USA		
Bozeman	45°40.0'N	111°02.5'W
College	64°51.6'N	147°50.2'W
Guam	13°35.3'N	144°54.7'W
Palmer	61°36'N	149°08'W
Sitka	57°03.4'N	135°19.5'W

NGSDC PUBLICATIONS (SOLID EARTH)* August 1978

The publications listed below are available from the National Geophysical and Solar-Terrestrial Data Center, NOAA/EDIS, Boulder, CO 80303. Place a check mark in the box at the left of each report that you would like to receive, print your name and mailing address on the reverse side, fold, and mail to NGSDC, or give to NGSDC representative. Please allow 4 weeks for receipt of the reports.

☐	SE-1	Catalog of Tsunamis in Alaska, March 1976	$ 1.00
☐	SE-2	Geodynamics International - 9, June 1976	1.00
☐	SE-3	Summary of Earthquake Focal Mechanisms for the Western Pacific - Indonesian Region, 1929-1973, March 1977	2.00
☐	SE-4	Catalog of Tsunamis in Hawaii, March 1977	1.00
☐	SE-5	Geodynamics International - 10, April 1977	1.00
☐	SE-6	Catalog of Seismograms and Strong-Motion Records, May 1977	2 00
☐	SE-7	Directory of Seismograph Stations, July 1977	3 00
☐	SE-8	Survey of Practice in Determining Magnitudes of Near Earthquakes, Part 2, August 1977	2.00
☐	SE-9	Survey of Practice in Determining Magnitudes of Near Earthquakes, Part 1, January 1978	2 00
☐	SE-10	Geodynamics International - 11, January 1978	2 00
☐	SE-11	The Information Explosion and Its Consequences for Data Acquisition, Documentation, and Processing, May 1978	1.00
☐	SE-12	Geodynamics International - 12, April 1978	2.00
☐	SE-13	Bibliography of Statistical Aspects of Seismicity (August 1978)	2.00
☐	NGSDC-1	A Historical Summary of Earthquake Epicenters In and Near Alaska, April 1976	2.00
☐	NGSDC-2	Final Report: An Analysis of Earthquake Intensities with Respect to Attenuation, Magnitude and Distance, August 1976	2.00
☐	NGSDC-3	An Analysis of Earthquake Intensities and Recurrence Rates In and Near Alaska, October 1976	2.00
☐	NGSDC-4	Reevaluation of Modified Mercalli Intensity Scale for Earthquakes Using Distance as Determinant, January 1978	4.00
☐	NGSDC Data Fact Sheet No. 1.	Some Summary Geomagnetic Activity Data 1932-1976 (1977)	1.00
☐	Magnetism of the Earth, Publication 40-1		3.00
☐	Magnetic Surveys - Serial 718, 1964		1.00
☐	Magnetic Poles and the Compass - Serial 726, 1962		1.00
☐	KGRD 5	Earthquake Data File Summary, May 1976	1.00
☐	KGRD 7	Catalog of Earthquake Photographs, December 1976	1.00
☐	KGRD 8	Catalog of Digital Bathymetric Data for the United States Coastal Regions, April 1977	1.00
☐	KGRD 9	Catalog of Seismogram Archives, May 1977	1.00
☐	KGRD 10	The Marine Geophysical Data Exchange Format - "MGD77", September 1977	1.00
☐	Principles Underlying the Interpretation of Seismograms, Spec. Publica. No. 254 (1966)		4.00
☐	Publication 41-1, Earthquake History of the United States, Revised Edition through 1970 (1973)		5.00
☐	Publication 41-2, Earthquake Investigation in the Western United States, 1931-1964 (1965)		3.00
☐	United States Earthquakes, 1975 (1977) (Annual Report available from 1928)		2.00
☐	Publication 282, Earthquake Investigations in the United States, 1969		1.00
☐	Earthquake Data Services and Publications, May 1978		Free
☐	Geomagnetism (Solid Earth) Data Services and Publications, April 1978		Free
☐	Marine Geophysics Data Services and Publications, May 1976		Free
☐	The Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks, Vol. I		6.00 †
☐	The Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks, Vol. II, Part A		5.00 †
☐	The Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks, Vol. II, Parts B & C		5.00 †
☐	The Prince William Sound, Alaska, Earthquake of 1964 and Aftershocks, Vol. III		5.00 †
☐	The Puget Sound, Washington, Earthquake of April 29, 1965		1.00
☐	The Parkfield, California, Earthquake of June 27, 1966		1.00
☐	The Fairbanks, Alaska, Earthquakes of June 21, 1967		1.00
☐	The Santa Rosa, California, Earthquakes of October 1, 1969		2.00
☐	San Fernando, California, Earthquake of February 9, 1971, Vol I, Effects on Buildings, Parts A & B		20.00 ††
☐	San Fernando, California, Earthquake of February 9, Vol. II, Utilities, Transportation, and Sociological Aspects		10.00 ††
☐	San Fernando, California, Earthquake of February 9, 1971, Vol. III, Geological and Geophysical Studies		10.00 ††
☐	Icosahedron Globe - Earthquake Epicenters of the World		**
☐	Tetrahedron Globe - Earthquake Epicenters of the World		**

† Complete set - $15.00
†† Complete set - $35.00
* Catalogs of data compilations are available free to users in the scientific community.
** Price: 10 or more copies, $0.10 each; 3 to 9 copies, $1.00 total; 1 copy free.