

aftershocks associated with the event; postearthquake geodetic surveys to determine the extent of crustal deformation; and geophysical effects associated with the shock, including water-table fluctuations and geomagnetic effects. (Available from Superintendent of Documents, address on p. 9. Stock No. 0317-0089. Price: \$10)

Tsunami Reports

Tsunami! The Great Waves describes the operation of this vital warning system in the Pacific areas. It discusses methods employed to warn coastal residents of a possible tsunami (popularly called "tidal waves") and outlines cautionary steps to be taken when an alarm is sounded. (Available from Superintendent of Documents, address on p. 9. Stock No. 003-017-00322-1. Price: \$0.55)

Catalog of Tsunamis in Alaska lists tsunamis from July 1788 through December 1974 and gives a brief description of each. (Available from World Data Center A for Solid Earth Geophysics, NOAA/EDIS, Boulder, CO 80303 Price: \$1)

Catalog of Tsunamis in Hawaii is a compilation of all data pertaining to tsunamis observed and instrumentally recorded in Hawaii from the early 1800s through December 1976. The list includes data, location, and magnitude of each earthquake and a brief description of tsunami effects. (Available from World Data Center A for Solid Earth Geophysics, address above. Price: \$1)

Regional Tsunami Warning System in Alaska is a leaflet that describes briefly the phenomenon called "tsunami." The procedure for alerting Alaskan coastal communities when the tsunami danger exists is discussed and a list of tsunami safety rules is provided. (Available from Oceanography Division, address below.)

Wave Reporting Procedures for Tide Observers in the Tsunami Warning System, Revised (1970) Edition provides general information on instrument maintenance and gives specific instructions to aid tide observers in reporting tsunamis. Examples of all types of tsunami emergencies and communications channels for each are given. (Available from Oceanography Division (W6), NOAA/NWS, Silver Spring, MD 20910.)

Popular Reports

Earthquake Information Bulletin is a two-color magazine that provides current information on recent earthquakes and seismological activities (published by the U.S. Geological Survey). The bi-monthly magazine translates into understandable terms the techniques used in investigating and describing earthquakes and describes past and continuing studies in seismology. (Available on subscription from Superintendent of Documents, address on p. 9. GPO Catalog No. I 19.65. Annual subscription \$3.00 (55 cents/single copy); 75 cents additional for foreign mailing. Make check or money order payable to Superintendent of Documents.)

Alaska lighthouse before 1946 tsunami



Aerial view of lighthouse after tsunami

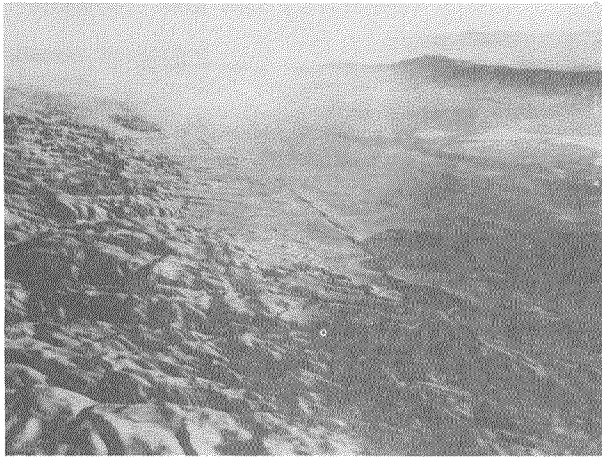


Volcanoes is a brochure that tells what volcanoes are, their geographic distribution, and types of volcanic activity. (Available from Branch of Distribution, U.S. Geological Survey, 1200 S. Eads Street, Arlington, VA 22202.)

Volcanoes of the United States is a small pamphlet that presents a description of volcanic activity, spectacular eruptions, and related phenomena. (Available from U.S. Geological Survey, address above.)

Active Faults of California is a brochure that describes the nature of faults and the earthquake activity related to them. A map shows locations of active faults. (Available from U.S. Geological Survey, address above.)

The San Andreas Fault is a brochure that describes the nature, behavior, and earthquake history of this famous California fault. (Available from U.S. Geological Survey, address above.)



The Interior of the Earth is a pamphlet that explains and graphically depicts the structure and nature of the Earth's crust, its mantle, and its core. (Available from the U.S. Geological Survey, address above.)

Earthquakes is a booklet that explains the nature and causes of earthquakes and describes the techniques used to detect, record, and measure seismic disturbances. (Available from U.S. Geological Survey, address above.)

Goals, Strategy, and Tasks of the Earthquake Reduction Program (Circular 701) describes the National earthquake program of the U.S. Geological Survey. (Available from U.S. Geological Survey, address above.)

Seismic Hazards and Land-Use Planning (Circular 690) discusses seismic hazards and implications

for land use, and earth-science data needed to assess seismic hazards. It also gives principal sources of geologic and seismic data. (Available from U.S. Geological Survey, address at left.)

Earthquake Prediction--Opportunity to Avert Disaster (Circular 729) is a report summarizing results of a conference on earthquake warning and response held in San Francisco, CA, on November 7, 1975. The report contains the texts of papers presented at the conference and the transcript of a panel discussion following the conference. (Available from U.S. Geological Survey, address at top left.)

Motion Picture Film Services is a pamphlet that provides an annotated list of motion picture films, available for public distribution, that describe earth science programs and USGS activities. (Available from U.S. Geological Survey, address at top left.)

NGSDC, The National Geophysical and Solar-Terrestrial Data Center defines the function of NSGDC and briefly describes its products and services.

Safety and Survival in an Earthquake is a brochure that describes the dangers from earthquakes and actions that citizens can take to reduce the dangers. (Available from U.S. Geological Survey, address at top left.)

Miscellaneous Catalogs

Earthquake Data File Summary, Key to Geophysical Records Documentation No. 5 describes the NSGDC earthquake data file, which contains information on about 116,000 earthquakes from June 1638 through 1976. It gives a summary of the file's contents, typical searches of the file, data formats, and sources of data. Price: \$1.

Catalog of Earthquake Photographs, Key to Geophysical Records Documentation No. 7 lists approximately 750 photographs on the subject of earthquakes and contains descriptions and examples of the collection. Many of the photographs show views of earthquake-damaged buildings, bridges, dams, and other man-made structures; several show spectacular landslides, rifts, and ground cracks resulting from destructive shocks. Price: \$1.

Catalog of Seismogram Archives, Key to Geophysical Records Documentation No. 9 is a comprehensive list of seismograms available from NSGDC. It describes the many special seismogram services and the formats in which the records are available. Price: \$1.

Summary of Earthquake Focal Mechanisms for the Western Pacific-Indonesian Region, 1929-1973, Report SE-3, is a catalog that lists 1,713 solutions from 48 earthquakes, most of which occurred since 1960.

It includes for each the data source, date and time of occurrence, epicenter, and magnitude. The poles of the two nodal planes, and the compression, tension, and null axes also are provided for each earthquake. (Available from World Data Center A for Solid Earth Geophysics. Price: \$2)

Catalog of Seismograms and Strong-Motion Records, Report SE-6 lists the WDC-A holdings of seismograms and strong-motion records, provides price lists, and describes formats in which the records are available. Part 1 of the catalog contains a list of (1) stations that participate in the WDC-A seismogram exchange on special request; (2) international data exchange earthquakes, and (3) seismograms available for USSR stations. Part 2 presents lists of triggering earthquakes and of strong-motion records that were written (by country and station). (Available from World Data Center A for Solid Earth Geophysics. Price: \$2)

Directory of Seismograph Stations (Participating in International Seismogram Exchange through World Data Centres), Report SE-7 lists 247 seismograph stations (and their technical characteristics) that have agreed to participate in Category II data exchange through the World Data Centers. The directory contains the following data for most stations: 1) general information, 2) site information, 3) instrumentation; 4) timing system; 5) type of reports, 6) references; and 7) comments. (Available from World Data Center A for Solid Earth Geophysics. Price: \$3)

Survey of Practice in Determining Magnitudes of Near Earthquakes, (2 books), Report SE-9, Part 1: North, Central, and South America; Report SE-8, Part 2: Europe, Asia, Africa, Australasia, the Pacific. These reports list the methods used in determining magnitudes of near earthquakes at over 100 seismograph stations throughout the world (Available from World Data Center A for Solid Earth Geophysics. Price: \$4)

A Historical Summary of Earthquake Epicenters In and Near Alaska, NOAA Technical Memorandum EDS NGSDC-1 describes the Alaska Earthquake Data File,

sources used in developing the file, and data limitations. It contains several useful tables and illustrations of Alaskan seismicity. Price \$2.

An Analysis of Earthquake Intensities with Respect to Attenuation, Magnitude, and Rate of Recurrence, NOAA Technical Memorandum EDS NGSDC-2 describes a method for determining systematically, by computer methods, the isoseismal areas and distances for many thousand localities experiencing earthquakes in the United States during the period 1928-1973. Suites of curves with corresponding formulae are presented, depicting the attenuation regimes typical of the Eastern and Western United States and for each of several subregions. A method of calculating recurrence curves is developed, which permits the determination of such a curve by computer/plotter for any point in the conterminous U.S. These curves are indices of the level of seismic activity over a period of time for intensities lower than the maximum ever experienced. Magnitude versus area of perceptibility and magnitude versus intensity relationships are given for each of the regions studied. The intensity file on which this publication is based contains over 60,000 reports. Price: \$2.

An Analysis of Earthquake Intensities and Recurrence Rates In and Near Alaska, NOAA Technical Memorandum EDS NGSDC-3 describes the intensity file, the formats in which the data are available, and the sources and limitations of the data. Microfiche of the data file are inserted in the pocket of the report. Price: \$2.

Reevaluation of Modified Mercalli Intensity Scale for Earthquakes Using Distance as Determinant, NOAA Technical Memorandum EDS NGSDC-4 describes the methods used in developing a new intensity scale for the United States. It is the first revision of the 1931 Modified Mercalli Intensity Scale to be based on a detailed analysis of about 400,000 intensity elements collected from 1928 through 1974. Price: \$4.