



Central United States

*Earthquake
Map Catalog
& Reference
Guide*



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ACKNOWLEDGMENTS

Publication of this catalog is a joint partnership between private business and government agencies: Kathleen Raupp of Employers Reinsurance Corporation, Joseph Rachel of the Federal Emergency Management Agency Region VII, and Edward Gray of the Missouri Emergency Management Agency. Support for this project was provided by the Central United States Earthquake Consortium (CUSEC), Memphis, Tennessee. The catalog was written by Ann Elledge of the Center for Earthquake Studies and final editing was performed by the Association of CUSEC State Geologists, Memphis, Tennessee. Printing was provided by Employers Reinsurance Corporation of Overland Park, Kansas. Thanks go to Tom Durham and James M. Wilkinson, Jr. of CUSEC and Edward S. Gray of the Missouri Emergency Management Agency for their many useful comments regarding this catalog. Special thanks to Kathleen Raupp of Employers Reinsurance Corporation for supporting the earthquake/disaster prevention effort in the Central United States. Southeast Missouri State University students Clayton Sneed, Mark Cummings, and Phillip Statler assisted in assembling the information.

HOW TO ORDER MAPS LISTED IN THIS GUIDE

For maps from the United States Geological Survey:

United States Geological Survey Information Services
Box 25286, MS 306
Denver, Colorado 80225
800-435-7627 (Orders)
303-202-4700 (Customer Service)
303-202-4693 (Fax)

For maps from the Missouri Department of Natural Resources - Geological Survey:

MODNR-DGLS
P.O. Box 250
Rolla, Missouri 65401-0250
573-368-2100

For maps from the Central United States Earthquake Consortium or the Association of CUSEC State Geologists:

Central United States Earthquake Consortium
2630 East Holmes Road
Memphis, Tennessee 38118
800-824-5817

For all other maps, please write to the address listed with each map in the guide. If you have any questions, please contact CUSEC at the above address.

INTRODUCTION

The Center for Earthquake Studies at Southeast Missouri State University in Cape Girardeau, Missouri, was commissioned by the Central United States Earthquake Consortium (CUSEC) in July 1996 to develop a catalog of geologic and seismotectonic maps of the New Madrid region. The intended users are the general public, elected officials, emergency managers, planners, engineers, geologists and insurance professionals who need and desire information regarding seismic hazards in the New Madrid region.

Each map in the catalog contains 12 descriptive fields. These fields consist of the following: title of map, author(s), date published, publication number, publisher/contact agency, map coordinates, map scale, map sheet size, intended users, region covered, map description, and limitations.

The catalog contains 56 reduced-size maps. The various maps include geologic and seismotectonic data for the New Madrid region, such as seismicity, faults, areas of landslides, distribution of liquefaction deposits, locations of geophysical surveys, and surface and subsurface geology. These copies are not to scale and are not intended for use in place of the original maps; they are only provided to demonstrate the coverage of the individual study areas. These maps are arranged by geographic area of the coverage ranging from state to regional scale.

Questions or comments regarding the content of the catalog may be addressed to Ms. Ann L. Elledge, Earthquake Education Specialist, Center for Earthquake Studies, 810 Normal Street, Cape Girardeau, Missouri 63701, or by phone at (573) 651-2019.

The maps in this catalog are not all inclusive of those developed for the New Madrid Seismic Zone. If the reader has developed a map, or knows of one that should be in the next edition of this catalog, please contact the Center for Earthquake Studies at Cape Girardeau.

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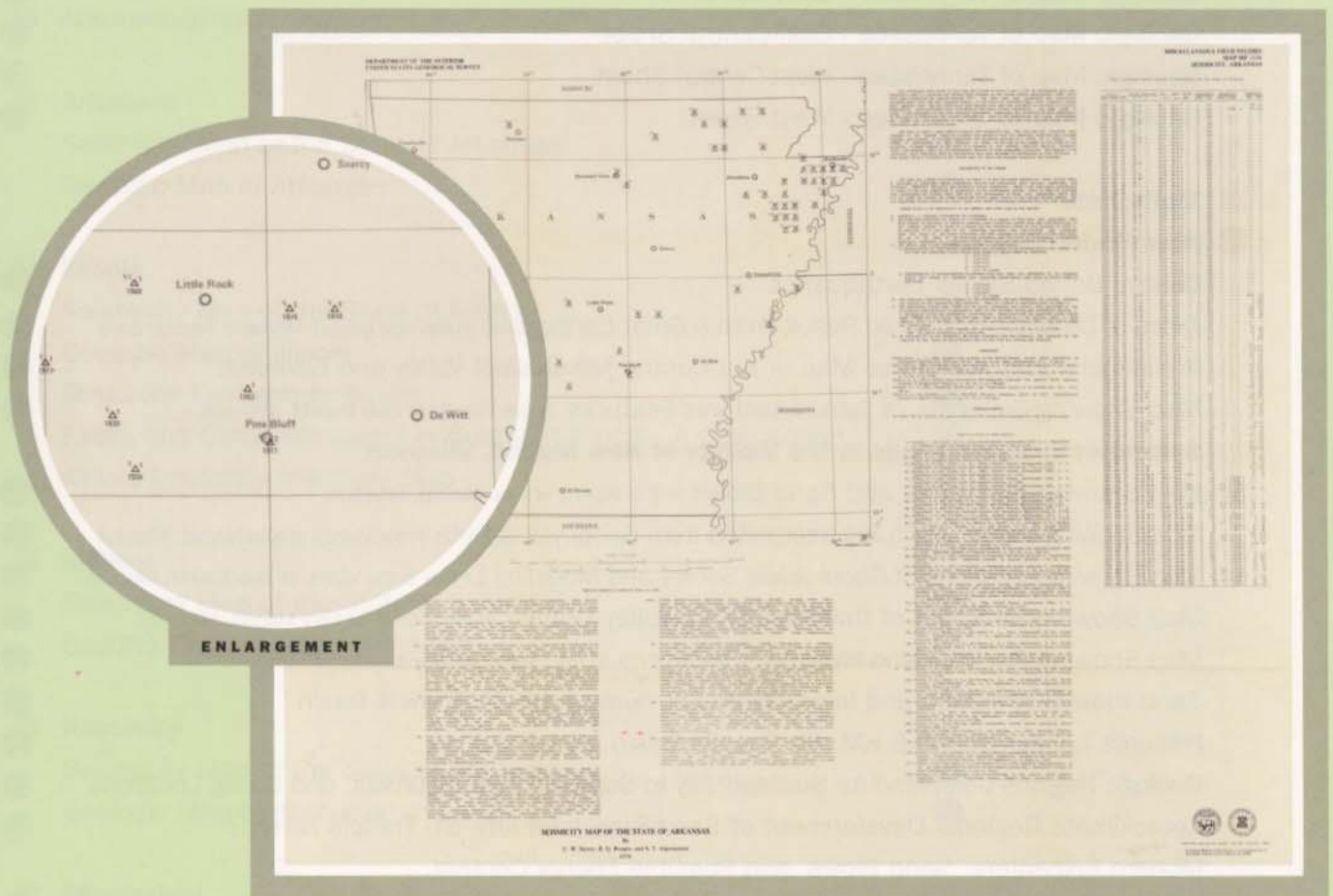
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SEISMICITY MAP OF THE STATE OF ARKANSAS



Map Description

This map shows the location of epicenters from 1699 to 1977, the number of earthquakes which occurred at each coordinate and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also included in a table are the date, origin time, epicentral location (north latitude, west longitude), depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for the epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map

Seismicity Map of the State of Arkansas

Author(s)

C.W. Stover, B.G. Reagor and S.T. Algermissen

Date Published

1979

Publication Number

Miscellaneous Field Studies Map MF-1154

Map Coordinates

Latitude: 33N-36.5N; Longitude: 89.75W-94.50W

Map Scale

1:1,000,000

Map Sheet Size

30.5H x 36.5W inches

Intended Users

General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals



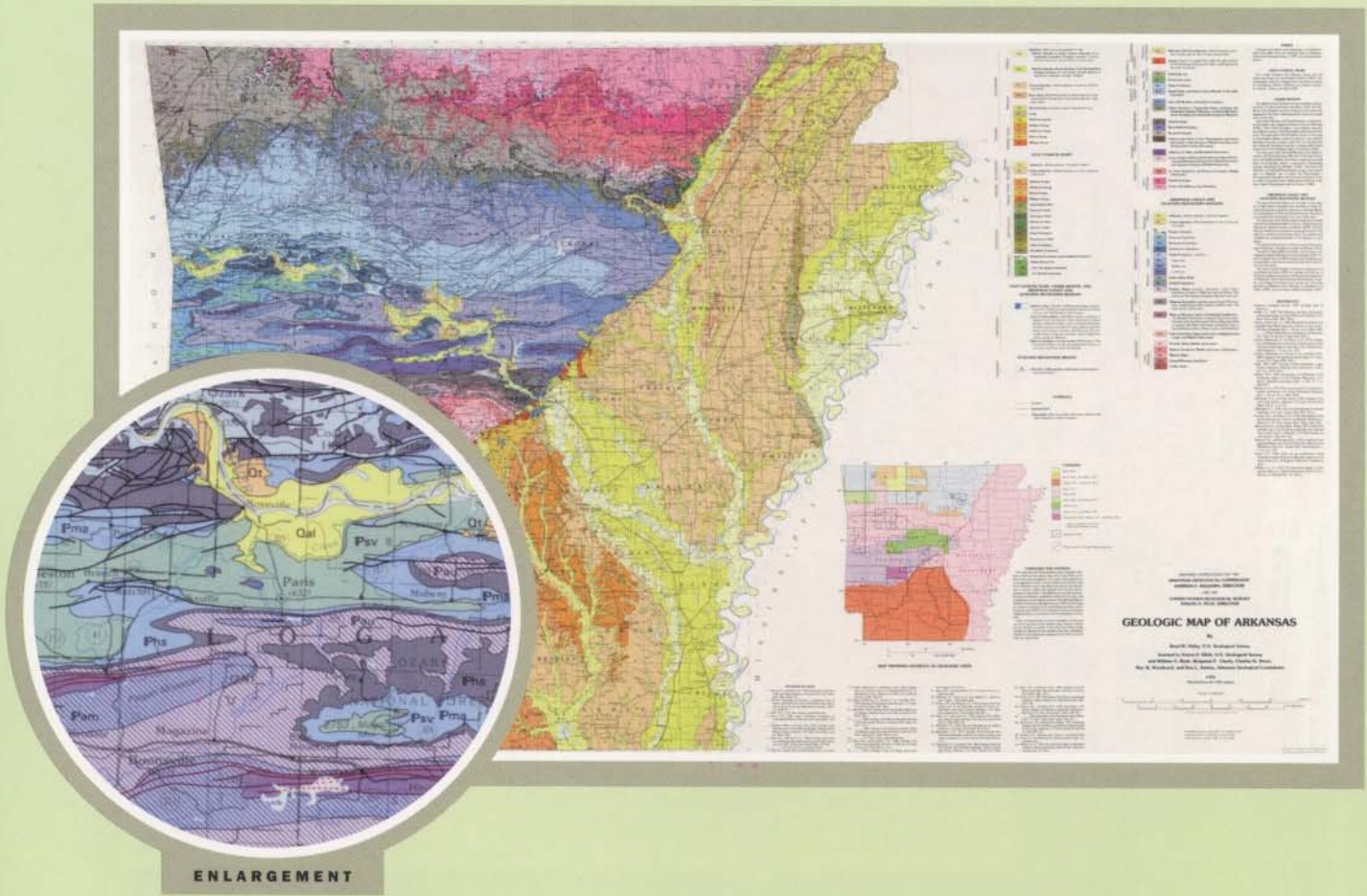
Region Covered

State of Arkansas

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225, and Arkansas Geological Commission, 3815 West Roosevelt Road, Little Rock, AR 72204

GEOLOGIC MAP OF ARKANSAS



Map Description

Shows locations of rock and alluvial units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

Scale not appropriate for site-specific applications.

Title of Map

Geologic Map of Arkansas

Author(s)

Boyd R. Haley

Date Published

1993

Publication Number

Not Available

Map Coordinates

Latitude: 33N-36.5N; Longitude: 89.75W-94.5W

Map Scale

1:500,000

Map Sheet Size

34H x 52W inches

Intended Users

Geologists, Geophysicists, Engineers, Planners, Insurance Professionals



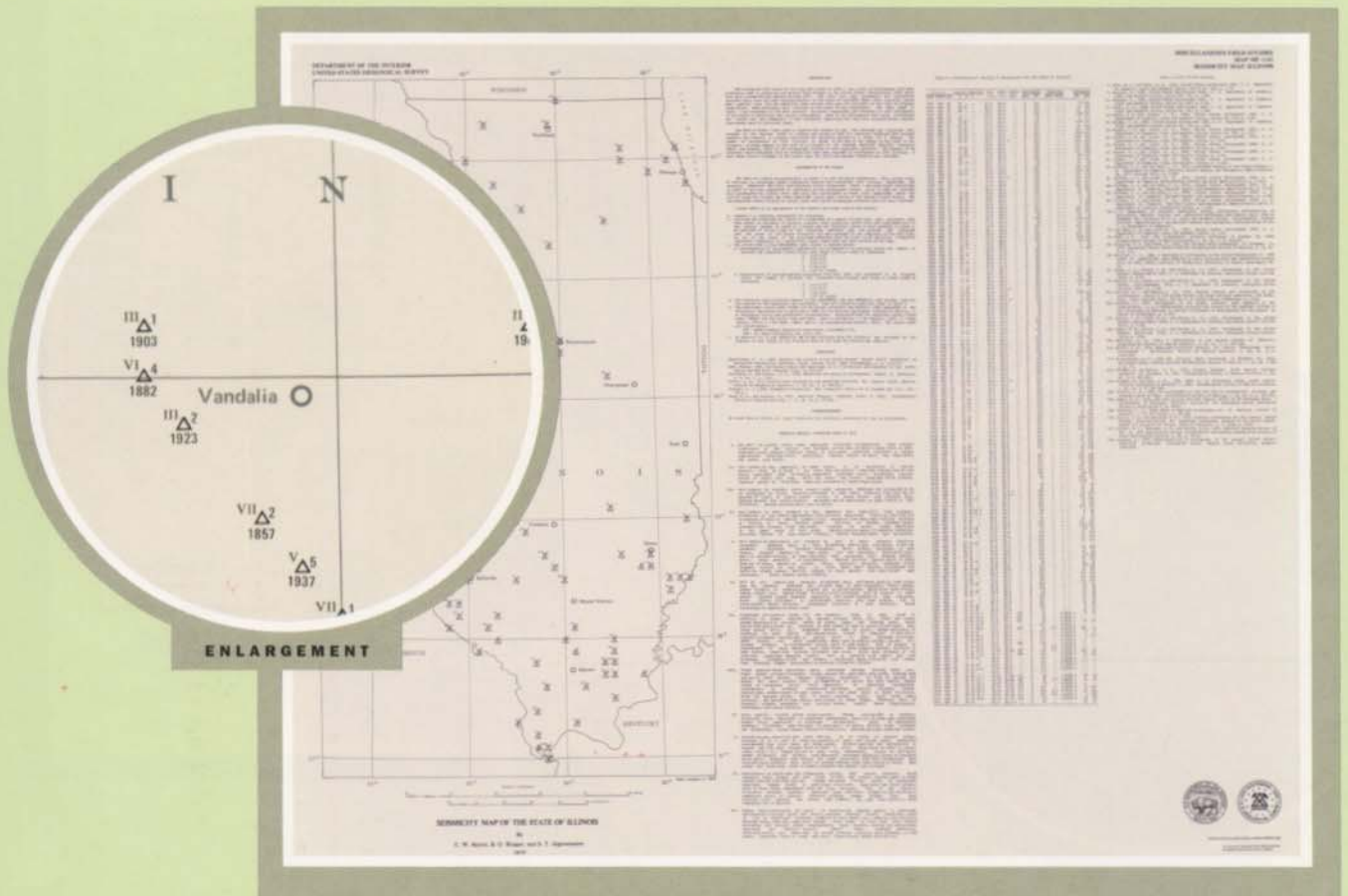
Region Covered

State of Arkansas

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225, and Arkansas Geological Commission, 3815 West Roosevelt Road, Little Rock, AR 72204

SEISMICITY MAP OF THE STATE OF ILLINOIS



Map Description

Shows the locations of historic epicenters from 1795 to 1975, the number of earthquakes which occurred at each coordinate, and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also given in a table are the date, origin time, epicentral location (north latitude, west longitude), depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for the epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map	Seismicity Map of the State of Illinois
Author(s)	C.W. Stover, B.G. Reagor and S.T. Algermissen
Date Published	1979
Publication Number	Miscellaneous Field Studies, Map MF-1143
Map Coordinates	Latitude: 37N-42.50N; Longitude: 87.50W-91.50W
Map Scale	1:1,000,000
Map Sheet Size	29.5H x 36W inches
Intended Users	General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals

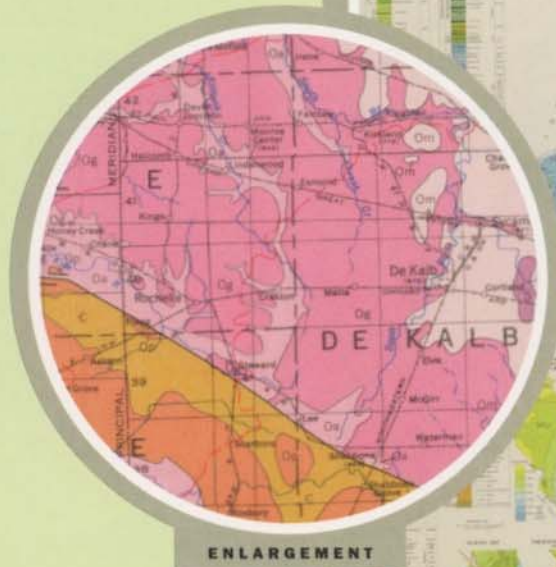


Region Covered
State of Illinois

Publisher/Contact Agency

U.S. Geological Survey, Map Distributor
Box 25286, Federal Center, Denver, CO
80225

GEOLOGIC MAP OF ILLINOIS



ENLARGEMENT



Map Description

Shows locations of rock units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

Scale not appropriate for site-specific applications.

Title of Map	Geologic Map of Illinois
Author(s)	H.B. Willman and Others
Date Published	1967
Publication Number	Not Available
Map Coordinates	Not Available
Map Scale	1:500,000
Map Sheet Size	57.5H x 41W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

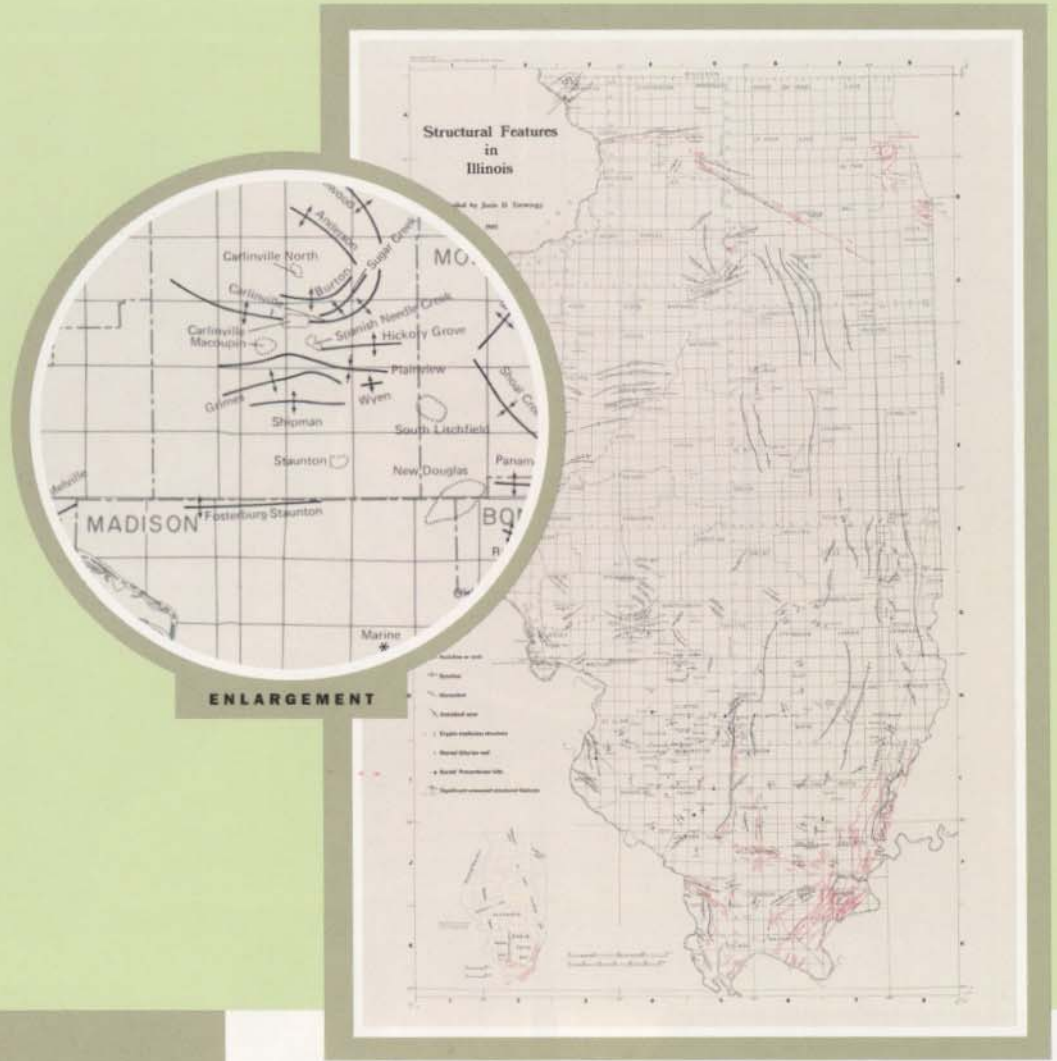


Region Covered
State of Illinois

Publisher/Contact Agency

Illinois State Geological Survey, 615 E. Peabody Drive, Champaign, IL 61820-6964

STRUCTURAL FEATURES IN ILLINOIS



Map Description

This map gives the locations of faults and folds within the state of Illinois. Also given are state and county borders and rivers.

Limitations

This is a generalized map with few cultural reference points; thus, site-specific are not appropriate.

Title of Map	Structural Features in Illinois
Author(s)	Janis D. Treworgy
Date Published	1981
Publication Number	Circular C519, PLATE 1
Map Coordinates	Latitude: 37N-42.5N; Longitude: 87.5W-91.5W
Map Scale	Not Available
Map Sheet Size	38H x 27W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

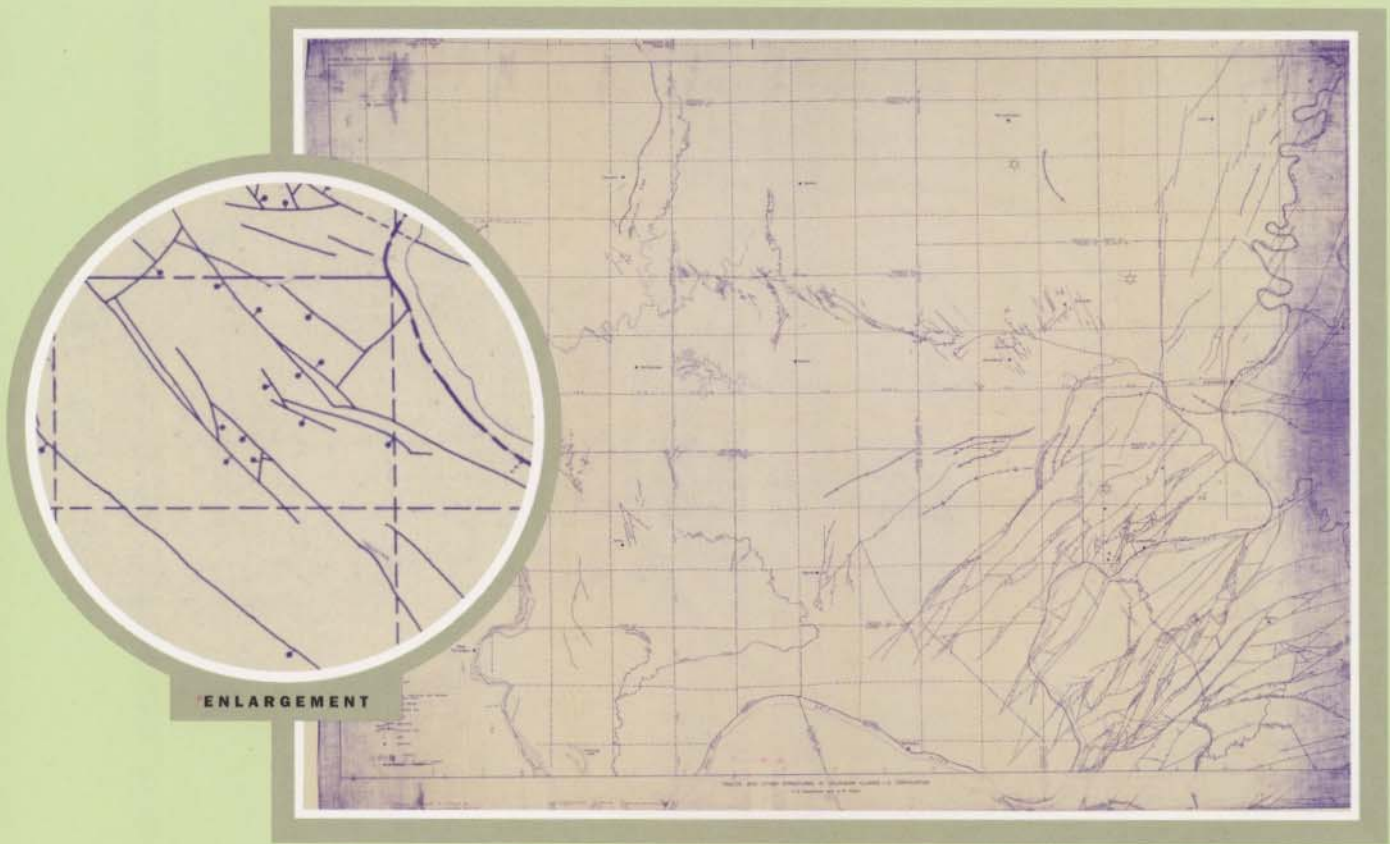


Region Covered
State of Illinois

Publisher/Contact Agency

Illinois State Geological Survey, 615 E. Peabody Drive, Champaign, IL 61820-6964

FAULTS AND OTHER STRUCTURES IN ILLINOIS - A COMPILATION



ENLARGEMENT

Map Description

Shows locations of faults and folds.
Also shows rivers, and state and county borders.

Limitations

This is a generalized map lacking cultural reference points; thus, site-specific usage would be difficult.

Title of Map

Faults and Other Structures in Southern Illinois- A Compilation

Author(s)

H.B. Stonehouse and G.M. Wilson

Date Published

1955

Publication Number

Circular C195, PLATE 1

Map Coordinates

Latitude: 36.0N-38.1N; Longitude: 87.5W-89.3W

Map Scale

1:63,360

Map Sheet Size

41.5H x 53.5W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



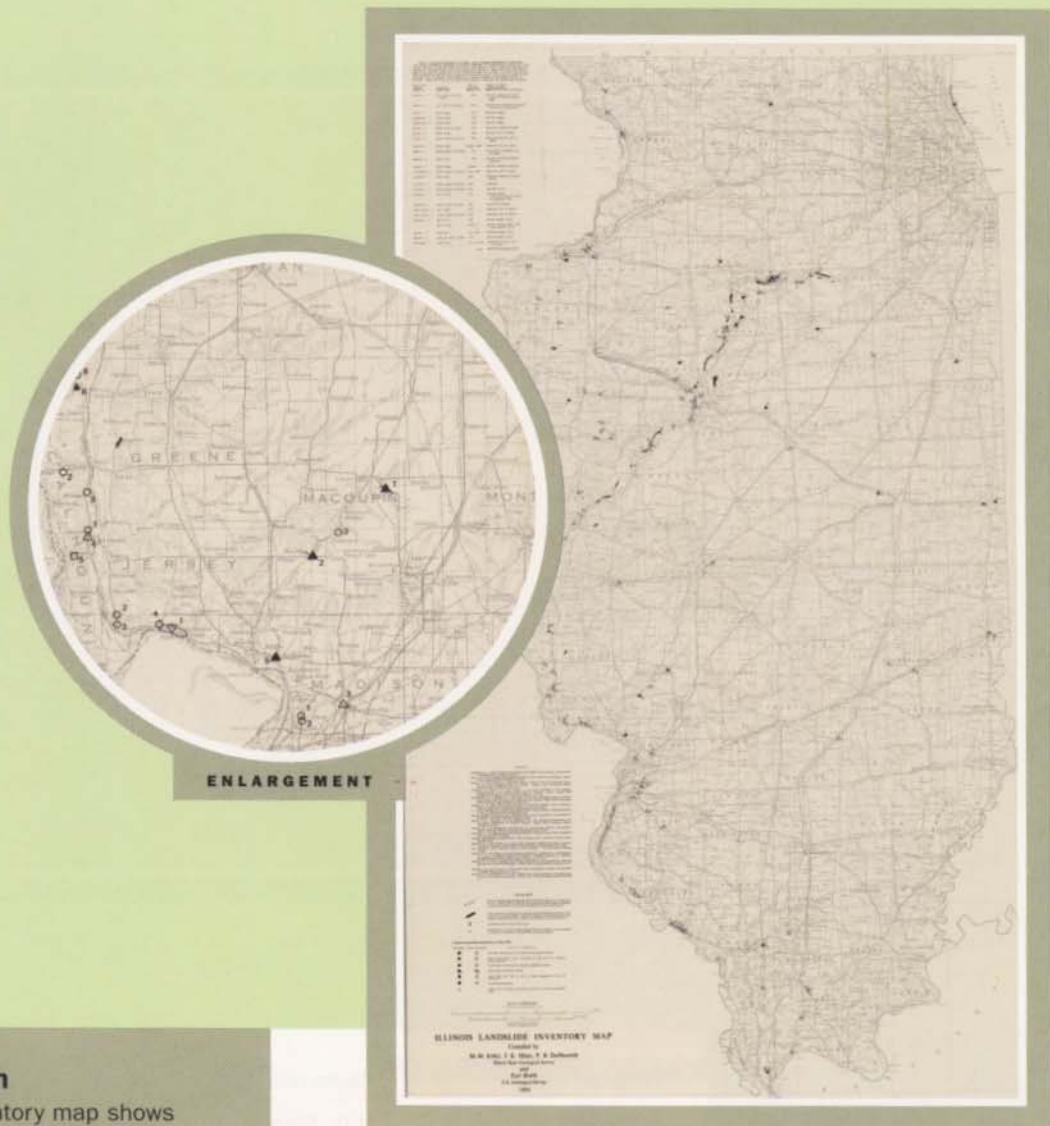
Region Covered

Southern Illinois Counties of
Franklin, Gallatin, Hamilton,
Hardin, Jackson, Johnson,
Massac, Pope, Saline, Union,
White, and Williamson

Publisher/Contact Agency

Illinois State Geological Survey, 615 E.
Peabody Drive, Champaign, IL 61820-
6964

ILLINOIS LANDSLIDE INVENTORY MAP



Map Description

This landslide inventory map shows areas of natural and man-made landslides, including rock falls, rock slumps, earth slumps, earth flows, and rock creep. Other information includes county and state borders, roads, railways, waterways, towns and cities and topography.

Limitations

Scale is not appropriate for site-specific applications.

Title of Map	Illinois Landslide Inventory Map
Author(s)	M.M. Killey, J.K. Hines, P.B DuMontelle and Earl Bra
Date Published	1984
Publication Number	Miscellaneous Field Studies Map MF-1691
Map Coordinates	Latitude: 37N-42.5N; Longitude: 87.5W-91.5W
Map Scale	1:500,000
Map Sheet Size	52.5H x 30.5W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Emergency Managers, Insurance Professionals

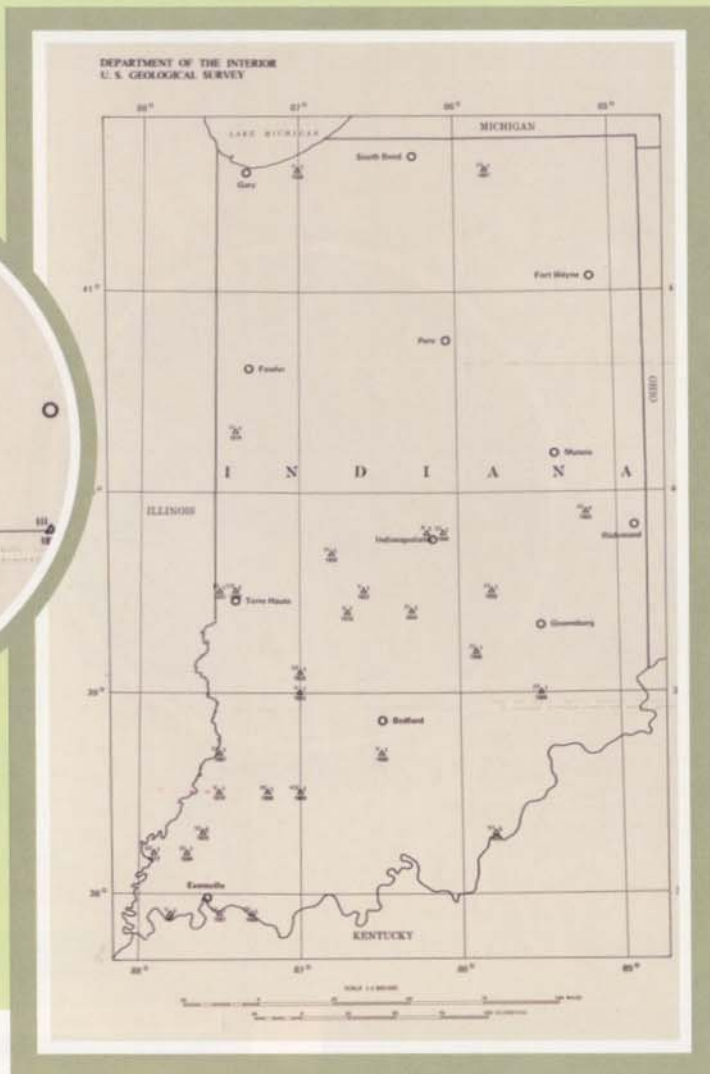


Region Covered
State of Illinois

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Federal, Box 25286, Federal Center, Denver, CO 80225 and Illinois State Geological Survey, 615 E. Peabody Drive, Champaign, IL 61820-6964

SEISMICITY MAP OF THE STATE OF INDIANA



Map Description

Shows the locations of historic epicenters from 1827 to 1976, number of earthquakes which occurred at each coordinate and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also given in a table are the date, origin time, epicentral location (north latitude, west longitude) depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map	Seismicity Map of the State of Indiana
Author(s)	C.W. Stover, B.G. Reagor and S.T. Algermissen
Date Published	1987
Publication Number	Miscellaneous Field Studies, Map MF-1974
Map Coordinates	Latitude: 37.3N-41.75N; Longitude: 85W-88W
Map Scale	1:1,000,000
Map Sheet Size	22H x 35.5W inches
Intended Users	General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals

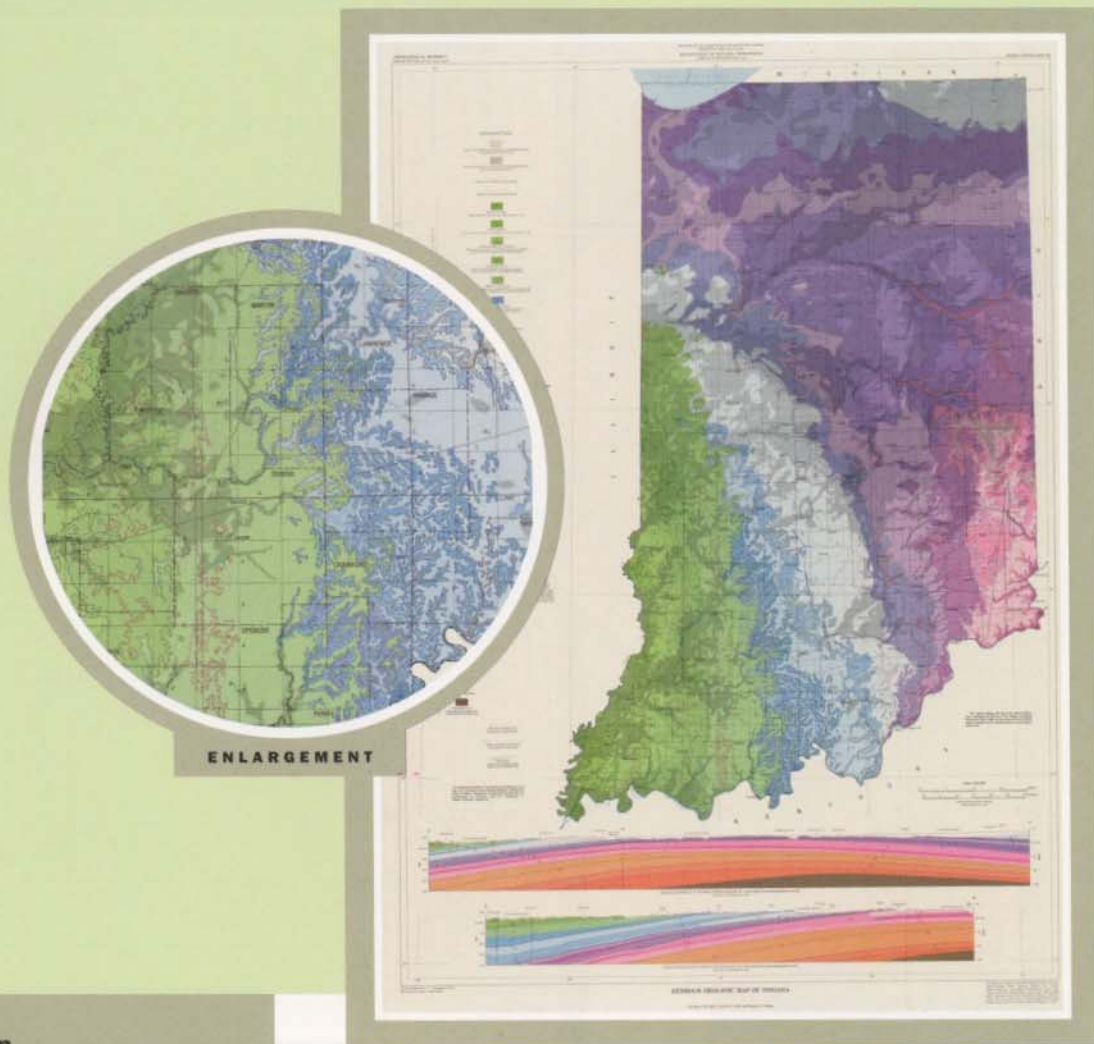


Region Covered
State of Indiana

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution,
Box 25286, Federal Center, Denver, CO
80225

BEDROCK GEOLOGIC MAP OF INDIANA



Map Description

Shows locations of rock units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

Scale not appropriate for site-specific applications.

Title of Map	Bedrock Geologic Map of Indiana
Author(s)	Henry H. Gray, Curtis H. Ault and Stanley J. Keller
Date Published	1987
Publication Number	Miscellaneous Map 48
Map Coordinates	Latitude: 33N-36.5N; Longitude: 89.75W-94.50W
Map Scale	1:500,000
Map Sheet Size	46H x 32.5W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

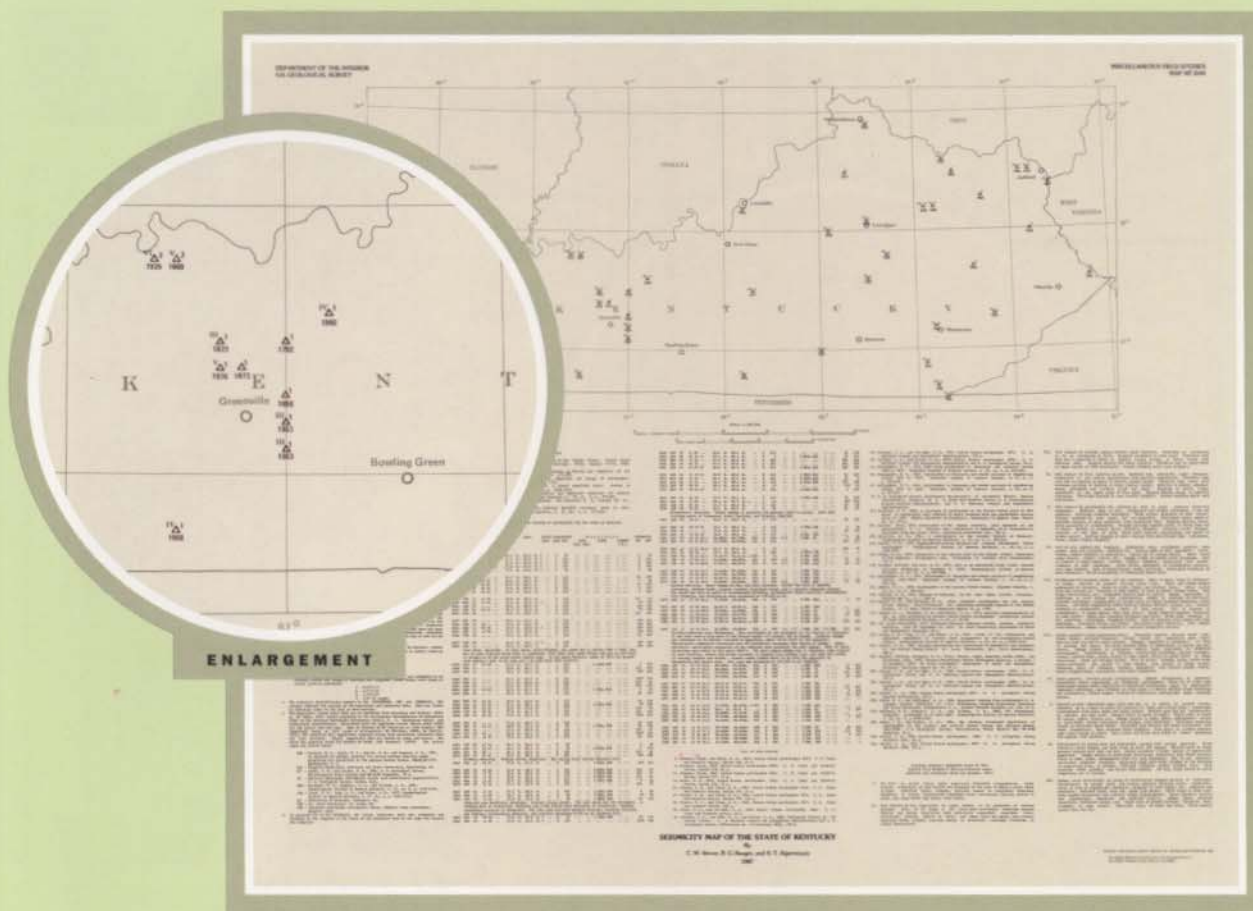


Region Covered
State of Indiana

Publisher/Contact Agency

Indiana Geological Survey, 611 North Walnut Grove, Bloomington, IN 47405

SEISMICITY MAP OF THE STATE OF KENTUCKY



Map Description

This map shows historic earthquake epicenters through 1983 within the boundaries of Kentucky. The coordinates of each earthquake are rounded to the nearest tenth of a degree. Locations of state boundaries and major cities in Kentucky are also shown.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map

Seismicity Map of the State of Kentucky

Author(s)

C.W. Stover, B.G. Reagor and S.T. Algermissen

Date Published

1987

Publication Number

Miscellaneous Field Studies Map MF-1144

Map Coordinates

Latitude: 36.N-39.3N; Longitude: 82W-89.5W

Map Scale

1:1,000,000

Map Sheet Size

32H x 37W inches

Intended Users

General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals

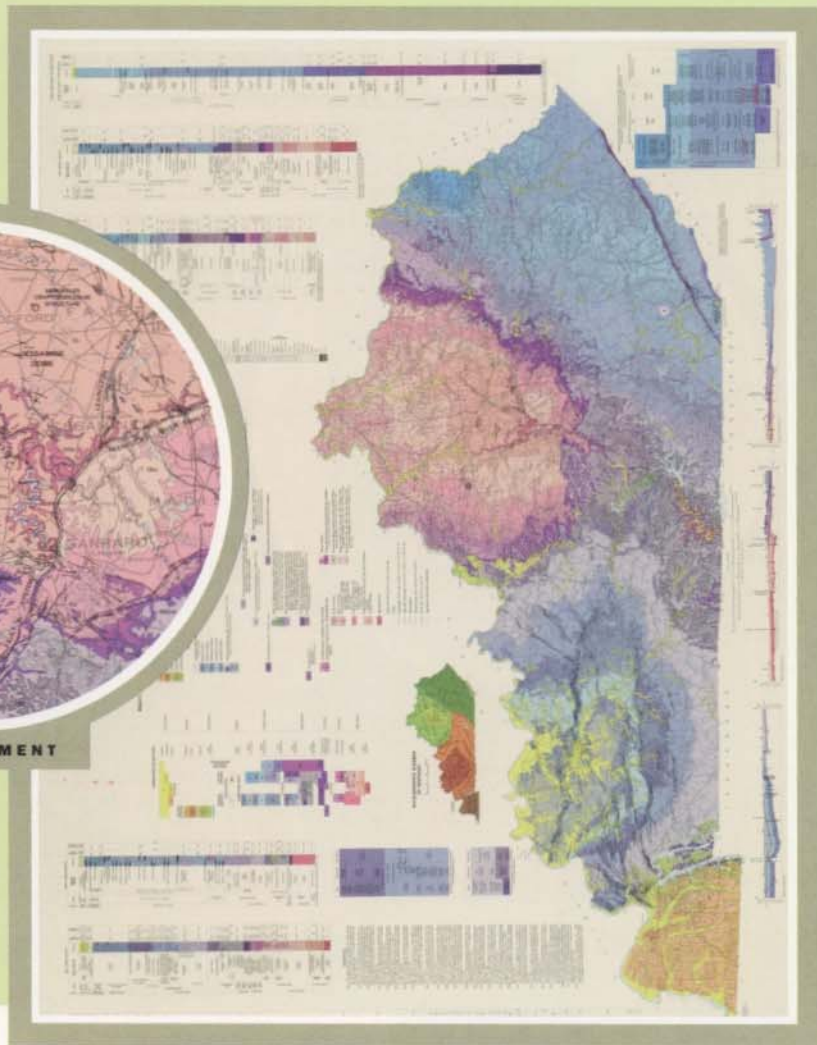
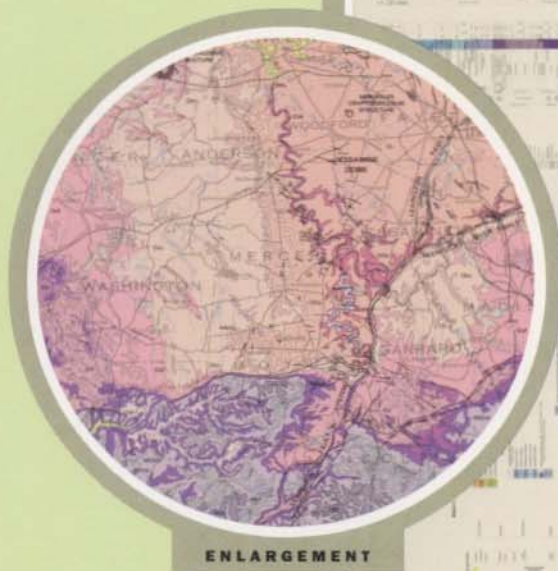


Region Covered
State of Kentucky

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO, 80225, and Kentucky Geological Survey, University of Kentucky, 228 Mining and Mineral Resources Bldg., Lexington, KY 40506-0107

GEOLOGIC MAP OF KENTUCKY



Map Description

Shows locations of rock and alluvial units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

Scale not appropriate for site-specific applications.

Title of Map	Geologic Map of Kentucky
Author(s)	Martin C. Noger
Date Published	1988
Publication Number	Not Available
Map Coordinates	Latitude: 36.5N-39.3N; Longitude: 82W-89.5W
Map Scale	1:500,000
Map Sheet Size	41H x 57.5W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

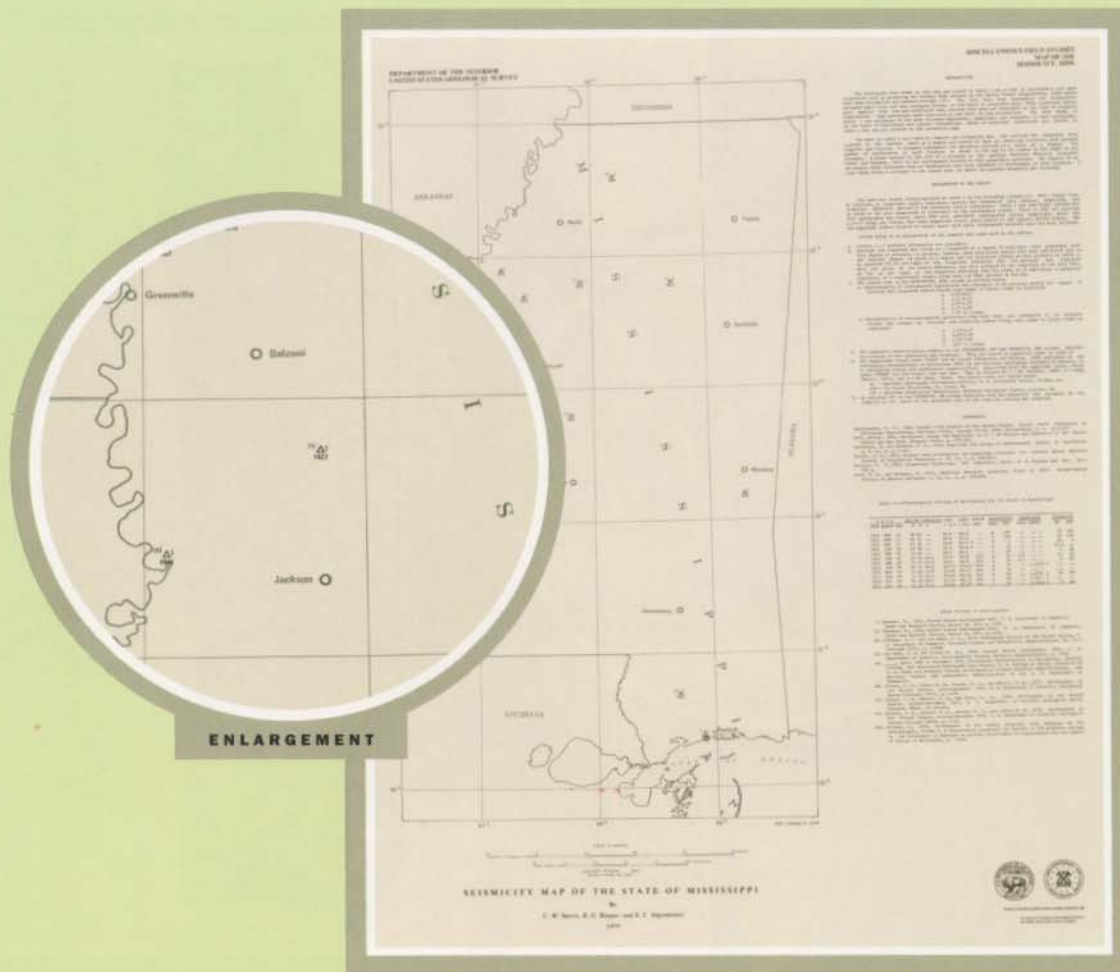


Region Covered
State of Kentucky

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225 and Kentucky Geological Survey, University of Kentucky, 228 Mining and Mineral Resources Bldg., Lexington, KY 40506-0107

SEISMICITY MAP OF THE STATE OF MISSISSIPPI



Map Description

Shows the locations of historic epicenters from 1923 to 1977, the number of earthquakes which occurred at each coordinate and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also given in a table are the date, origin time, location in north latitude and west longitude, depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map

Seismicity Map of the State of Mississippi

Author(s)

C.W. Stover, B.G. Reagor and S.T. Algermissen

Date Published

1979

Publication Number

Miscellaneous Field Studies, Map MF-1058

Map Coordinates

Latitude: 30N-35N; Longitude: 88.25W-91.75W

Map Scale

1:1,000,000

Map Sheet Size

31H x 24W inches

Intended Users

General Public, Planners, Emergency Managers, Engineers Geologists, Geophysicists, Insurance Professionals



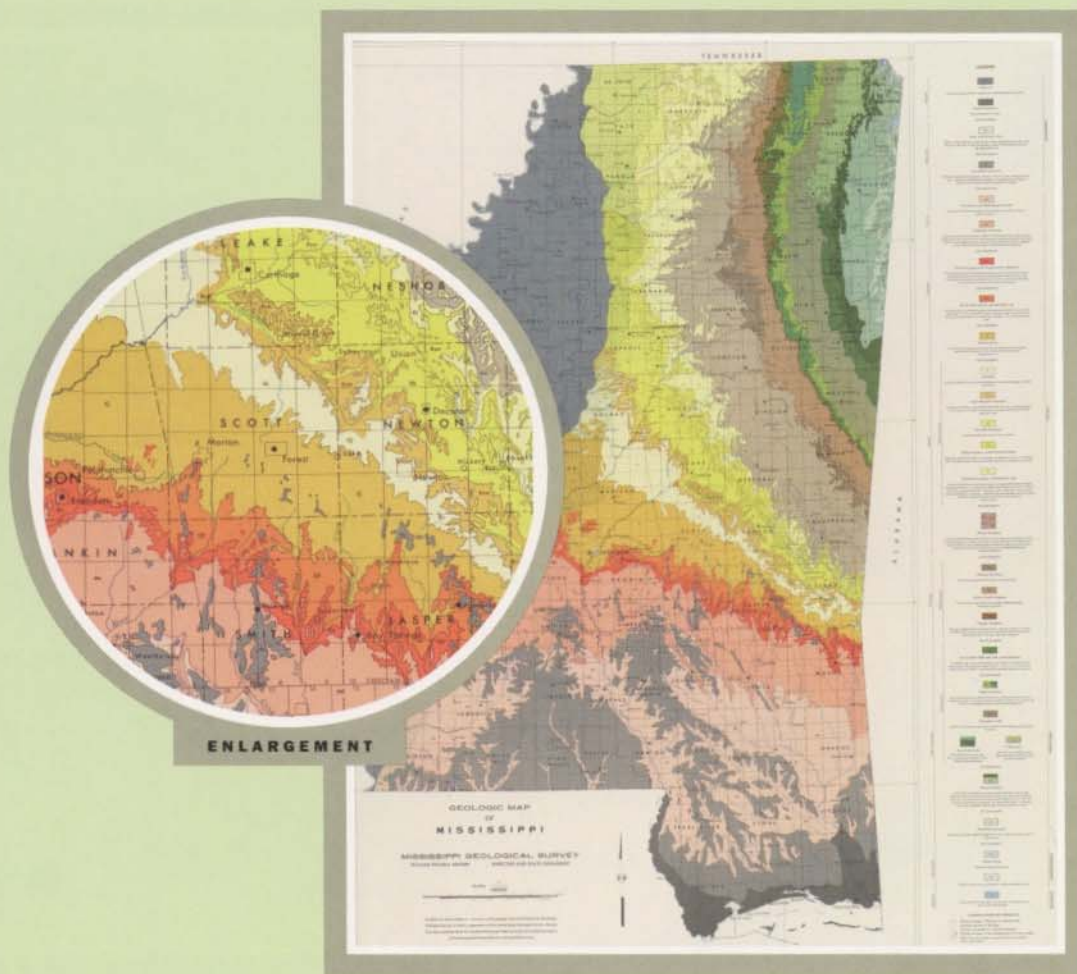
Region Covered

State of Mississippi

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225

GEOLOGIC MAP OF MISSISSIPPI



Map Description

Shows locations of rock units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

Scale not appropriate for site-specific applications.

Title of Map	Geologic Map of Mississippi
Author(s)	Alvin R. Bicker, Jr.
Date Published	1969
Publication Number	Not Available
Map Coordinates	Latitude: 30N-35N; Longitude: 88.25W-91.75W
Map Scale	1:500,000
Map Sheet Size	45.5H x 36W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

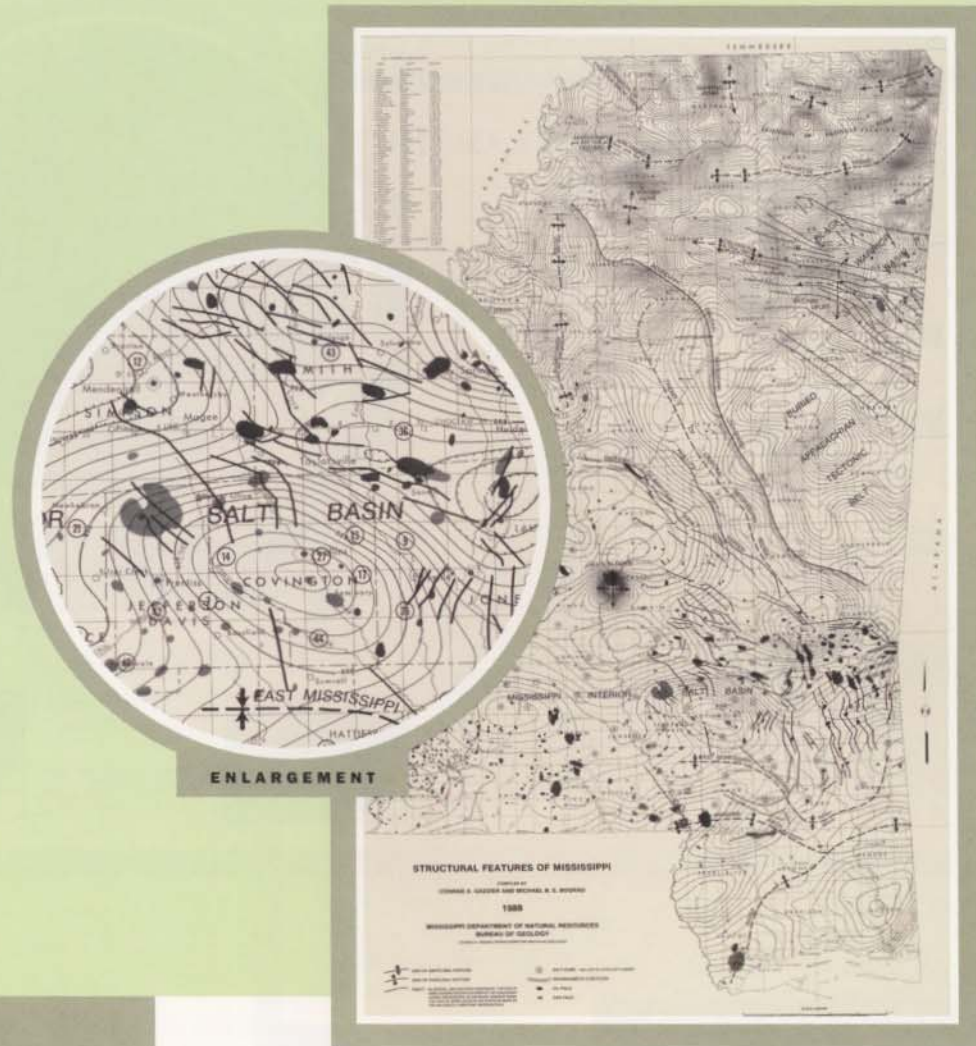


Region Covered
State of Mississippi

Publisher/Contact Agency

Mississippi Department of Environment
Quality, Office of Geology, P.O. Box
20307, Jackson, MS 39289-1307

STRUCTURAL FEATURES OF MISSISSIPPI



Map Description

This map gives the locations of anticlinal and synclinal features along with faults, salt domes, aeromagnetic contours, oil fields and gas fields.

Limitations

This is a generalized map with few cultural reference points; thus, site-specific applications are not appropriate.

Title of Map	Structural Features of Mississippi
Author(s)	Conrad A. Gazzier and Michael B.E. Bograd
Date Published	1988
Publication Number	Not Available
Map Coordinates	Latitude: 30N-35N; Longitude: 89.5W-91.4W
Map Scale	1:500,000
Map Sheet Size	46.5H x 29W inches
Intended Users	Geologists, Geophysicists, Engineers, Insurance Professionals

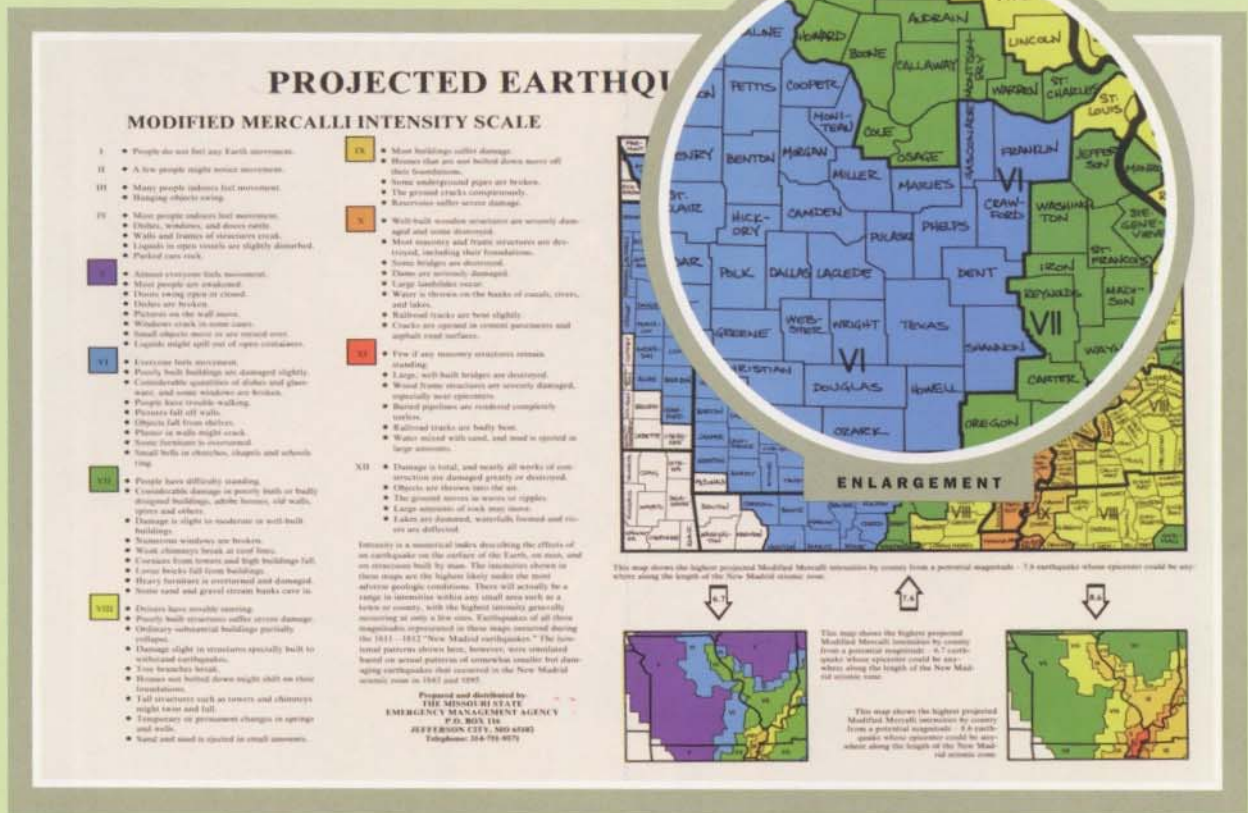


Region Covered
State of Mississippi

Publisher/Contact Agency

Mississippi Department of Environmental Quality, Office of Geology, P.O. Box 20307, Jackson, MS 39289-1307

PROJECTED EARTHQUAKE INTENSITIES



Map Description

This map shows hypothetical maximum intensities by county that would result from a magnitude 6.7, 7.6 or 8.6 earthquake anywhere along the New Madrid seismic zone. The composite intensity map is believed to represent the upper level of shaking likely to occur in any county regardless of the location of the epicenter within the seismic zone. State and county boundaries are shown.

Limitations

This composite intensity map shows a more widespread distribution of effects than would result from a single earthquake of magnitude 6.7, 7.6 or 8.6 because the distribution of effects were plotted for magnitude 6.7, 7.6 or 8.6 earthquakes occurring anywhere from the northern to the southern end of the seismic zone. Thus, for an actual epicenter near the southern end of the seismic zone, intensities in the northern part of the map would be lower than shown and, similarly, for an epicenter near the northern part of the seismic zone, intensities in the southern part of the map would be lower than shown.

Title of Map

Projected Earthquake Intensities

Author(s)

Not Available

Date Published

Not Available

Publication Number

Not Available

Map Coordinates

Not Available

Map Scale

Not Available

Map Sheet Size

11H x 17W inches also available in 22H x 34W inches

Intended Users

Emergency Response Planners, Land Use Planners, Insurance Professionals



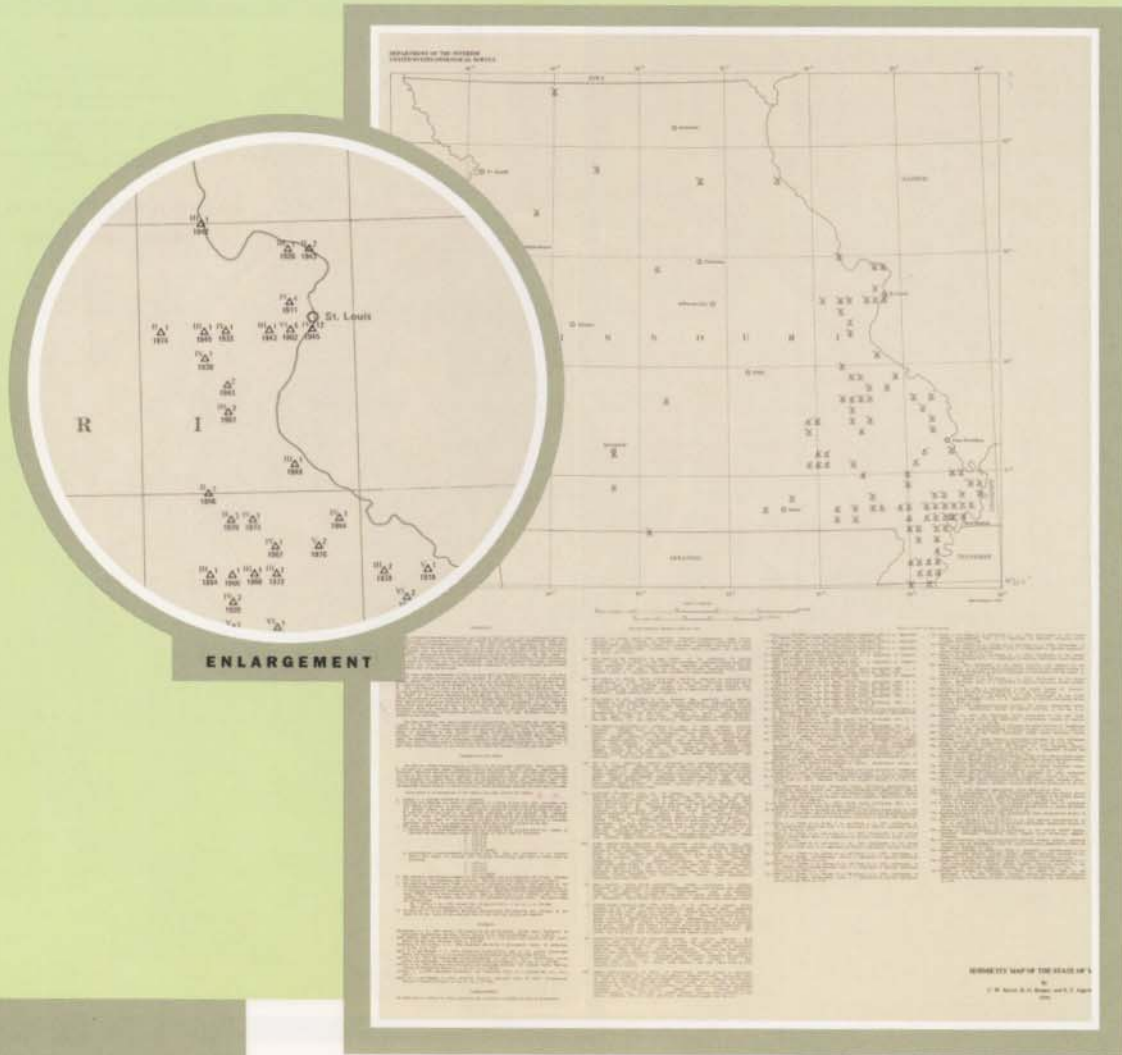
Region Covered

State of Missouri along with parts of Arkansas, Illinois, Indiana, Kansas, Nebraska, Kentucky, Oklahoma and Tennessee

Publisher/Contact Agency

The Missouri State Emergency Management Agency, P.O. Box 116, Jefferson City, MO 65102

SEISMICITY MAP OF THE STATE OF MISSOURI



Map Description

This map shows the locations of epicenters from 1812 to 1977, the number of earthquakes which occurred at each coordinate and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also given in a table are the date, origin time, epicentral location (north latitude, west longitude), depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map	Seismicity Map of the State of Missouri
Author(s)	C.W. Stover, B.G. Reagor and S.T. Algermissen
Date Published	1979
Publication Number	Miscellaneous Field Studies, Map MF-1155
Map Coordinates	Latitude: 36N-40.6N Longitude: 89W-95.8W
Map Scale	1:1,000,000
Map Sheet Size	39.5H x 41.5W inches
Intended Users	General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals

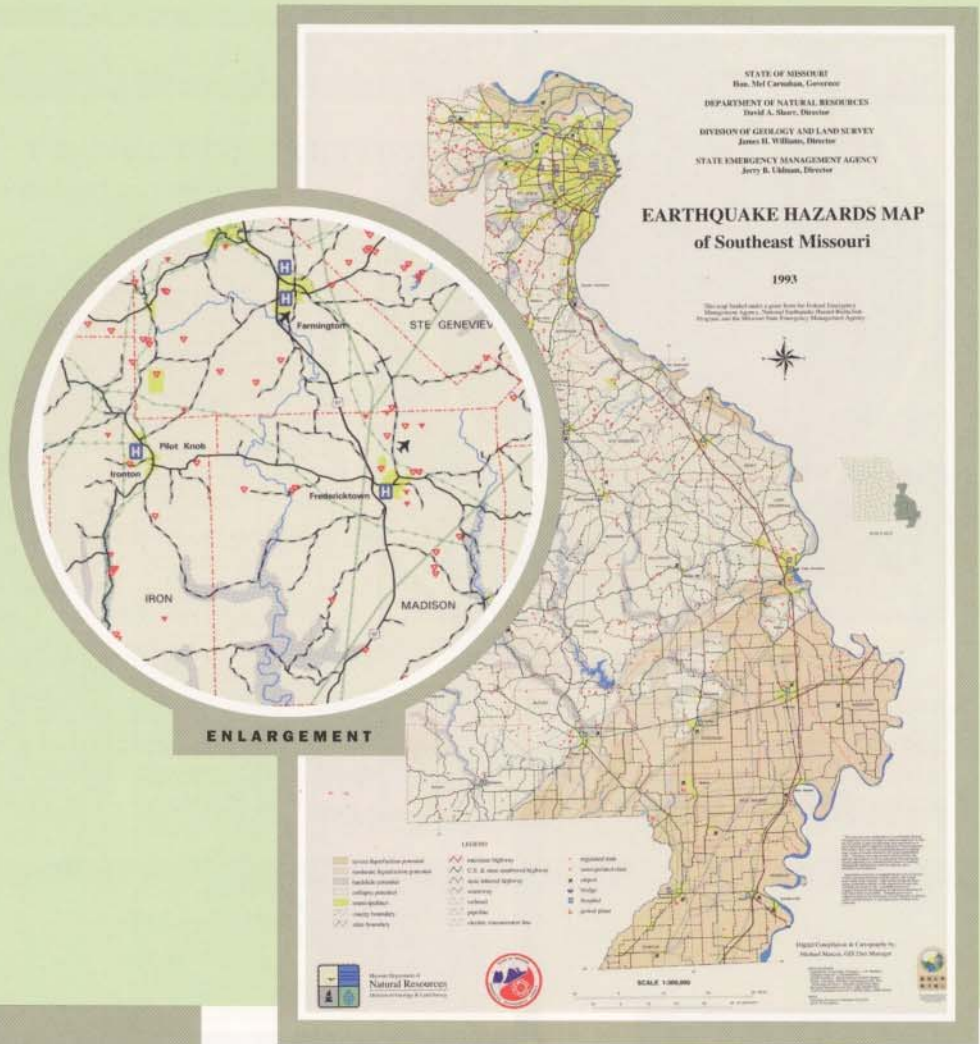


Region Covered
State of Missouri

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution,
Box 25286, Federal Center, Denver, CO
80225

EARTHQUAKE HAZARDS MAP OF SOUTHEAST MISSOURI



Map Description

Generalized areas of severe liquefaction potential, moderate liquefaction potential, landslide potential and collapse potential. Also shows highways, waterways, railroads, pipelines, electric transmission lines, regulated and nonregulated dams, airports, river bridges, hospitals, power plants, municipalities, and county and state boundaries.

Limitations

The scale of the map has necessitated combining large areas of diverse character into single generalized units. Therefore, this map should not be used for site specific applications such as evaluating the earthquake hazard potential of an individual land parcel or building. The map provides information only on the potential for a particular hazard accompanying a large earthquake anywhere in or near the region. The map provides no information on the likely locations of future earthquakes or the areas that will be most strongly affected by these earthquakes.

Title of Map	Earthquake Hazards Map of Southeast Missouri
Author(s)	J.W. Whitfield, D. Hoffman, K. Wedge and M. Marcus
Date Published	1993
Publication Number	Not Available
Map Coordinates	Latitude: 36N-39N; Longitude: 89W-91W
Map Scale	1:300,000
Map Sheet Size	51H x 33W inches
Intended Users	Emergency Response Planners, Land Use Planners, Engineers, Geologists, Insurance Professionals

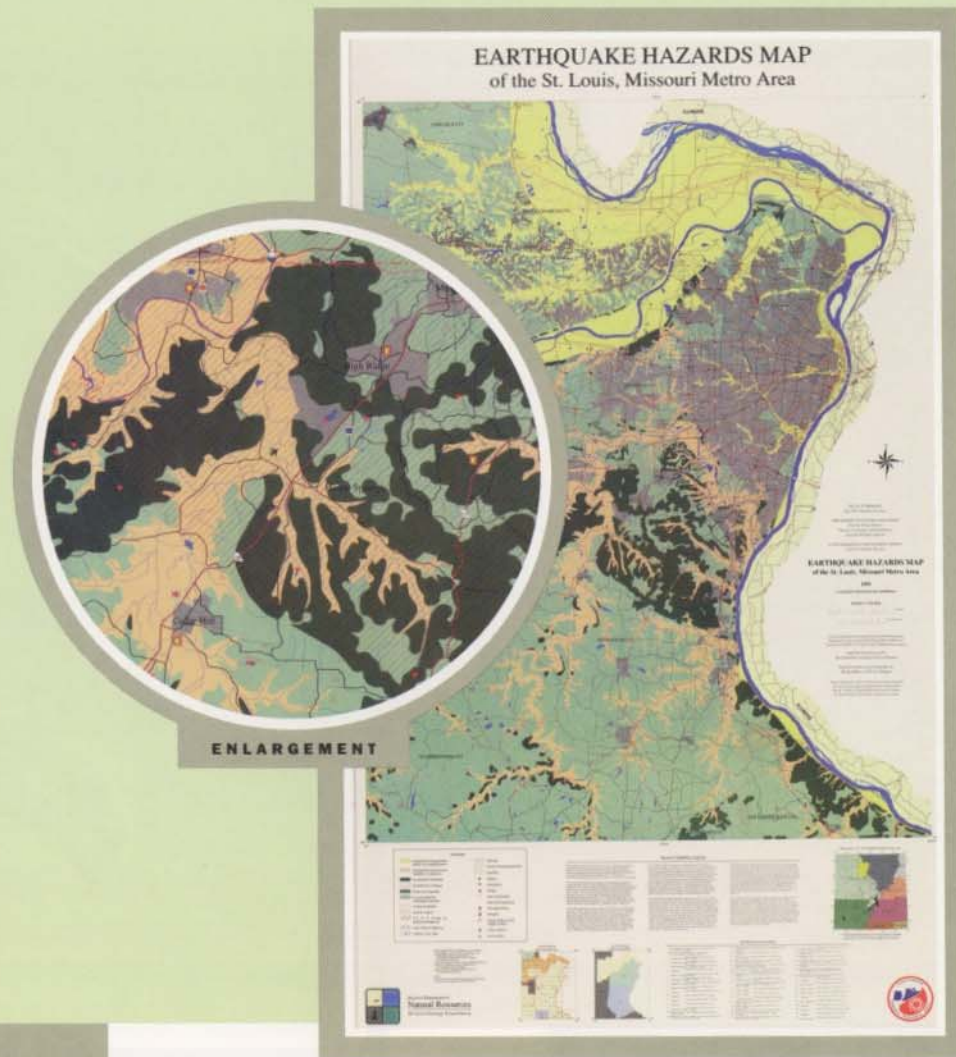
Region Covered

Southeast Missouri counties:
Bollinger, Butler, Cape Girardeau,
Carter, Dunklin, Iron, Jefferson,
Madison, Mississippi, New
Madrid, Pemiscot, Perry,
Reynolds, Ripley, Scott, St.
Charles, St. Francois, St. Louis,
Ste. Genevieve, Stoddard,
Washington, Wayne and
St. Louis City

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402 and Missouri State Emergency Management Agency, P.O. Box 116, Jefferson City, MO 65102

EARTHQUAKE HAZARDS MAP OF THE ST. LOUIS, MISSOURI METRO AREA



Map Description

Generalized areas of liquefaction potential, soil amplification potential, landslide potential and ground collapse potential. Also shows highways, waterways, railroads, pipelines, electric transmission lines, regulated and nonregulated dams, airports, bridges, emergency facilities and county and state boundaries.

Limitations

The scale of the map has necessitated combining large areas of diverse character into single generalized units. Therefore, this map should not be used for site specific applications such as evaluating the earthquake hazard potential of an individual land parcel or building. The map gives information only on the potential for a particular hazard accompanying a large earthquake anywhere in or near the region. The map provides no information on the likely locations of future earthquakes or the areas that will be most strongly affected by these earthquakes.

Title of Map

Earthquake Hazards Map of the St. Louis, Missouri Metro Area

Author(s)

David Hoffman

Date Published

1995

Publication Number

Not Available

Map Coordinates

Latitude: 38N-39N; Longitude: 90W-91W

Map Scale

1:100,000

Map Sheet Size

59.5H x 34.5W inches

Intended Users

Emergency Response Planners, Land Use Planners, Engineers, Geologists, Insurance Professionals



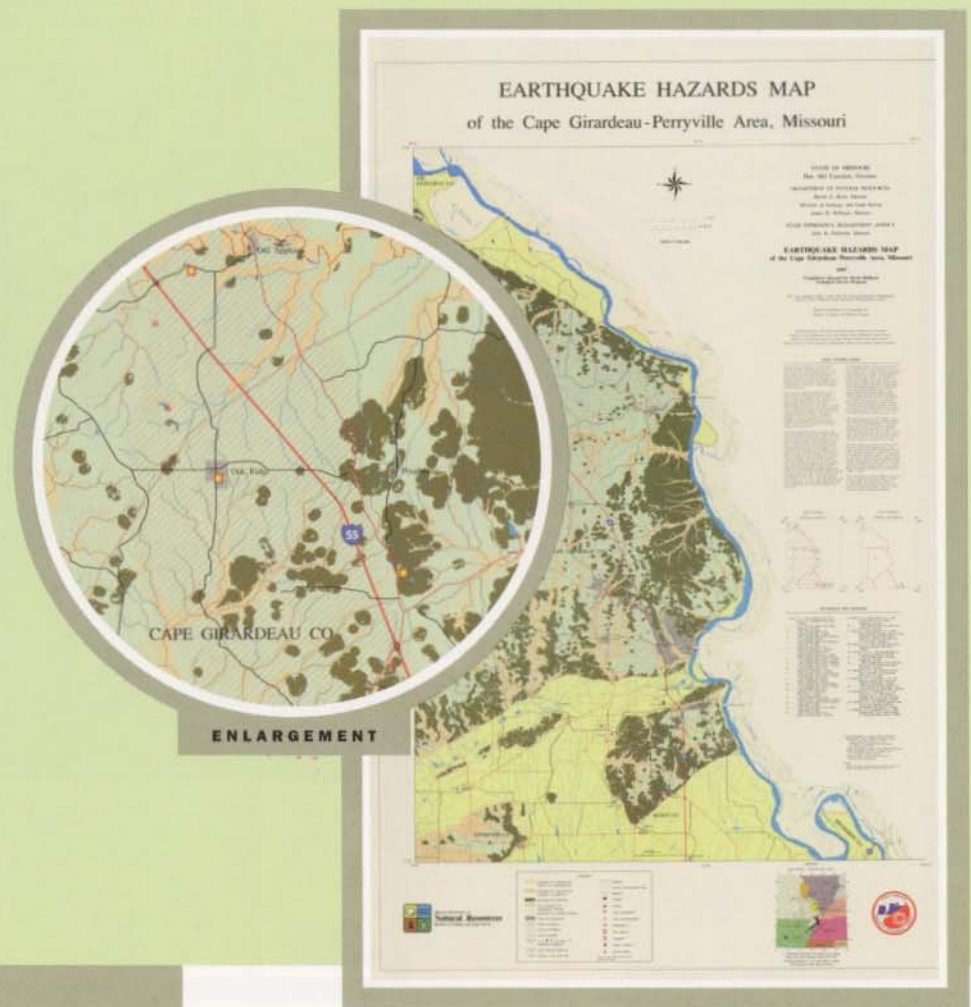
Region Covered

Missouri Counties: St. Louis and St. Louis City, St. Charles, Jefferson, Lincoln, Warren, Franklin, Washington, St. Francis and Ste. Genevieve

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402 and Missouri State Emergency Management Agency, P.O. Box 116, Jefferson City, MO 65102

EARTHQUAKE HAZARDS MAP OF THE CAPE GIRARDEAU-PERRYVILLE AREA, MISSOURI



Map Description

Generalized areas of liquefaction potential, soil amplification potential, landslide potential and ground collapse potential. Also shows highways, waterways, railroads, electric transmission lines, pipelines, regulated and nonregulated dams, airports, bridges, emergency facilities and county and state boundaries.

Limitations

The scale of the map has necessitated combining large areas of diverse character into single generalized units. Therefore, this map should not be used for site specific applications such as evaluating the earthquake hazard potential of an individual land parcel or building. The map gives information only on the potential for a particular hazard accompanying a large earthquake anywhere in or near the region. The map gives no information on the likely locations of future earthquakes or the areas that will be most strongly affected by these earthquakes.

Title of Map	Earthquake Hazards Map of the Cape Girardeau Perryville Area, Missouri
Author(s)	David Hoffman
Date Published	1997
Publication Number	Not Available
Map Coordinates	Latitude: 37N-38N; Longitude: 89.125W-90W
Map Scale	1:100,000
Map Sheet Size	58.5H x 35.5W inches
Intended Users	Emergency Response Planners, Land Use Planners, Engineers, Geologists, Insurance Professionals



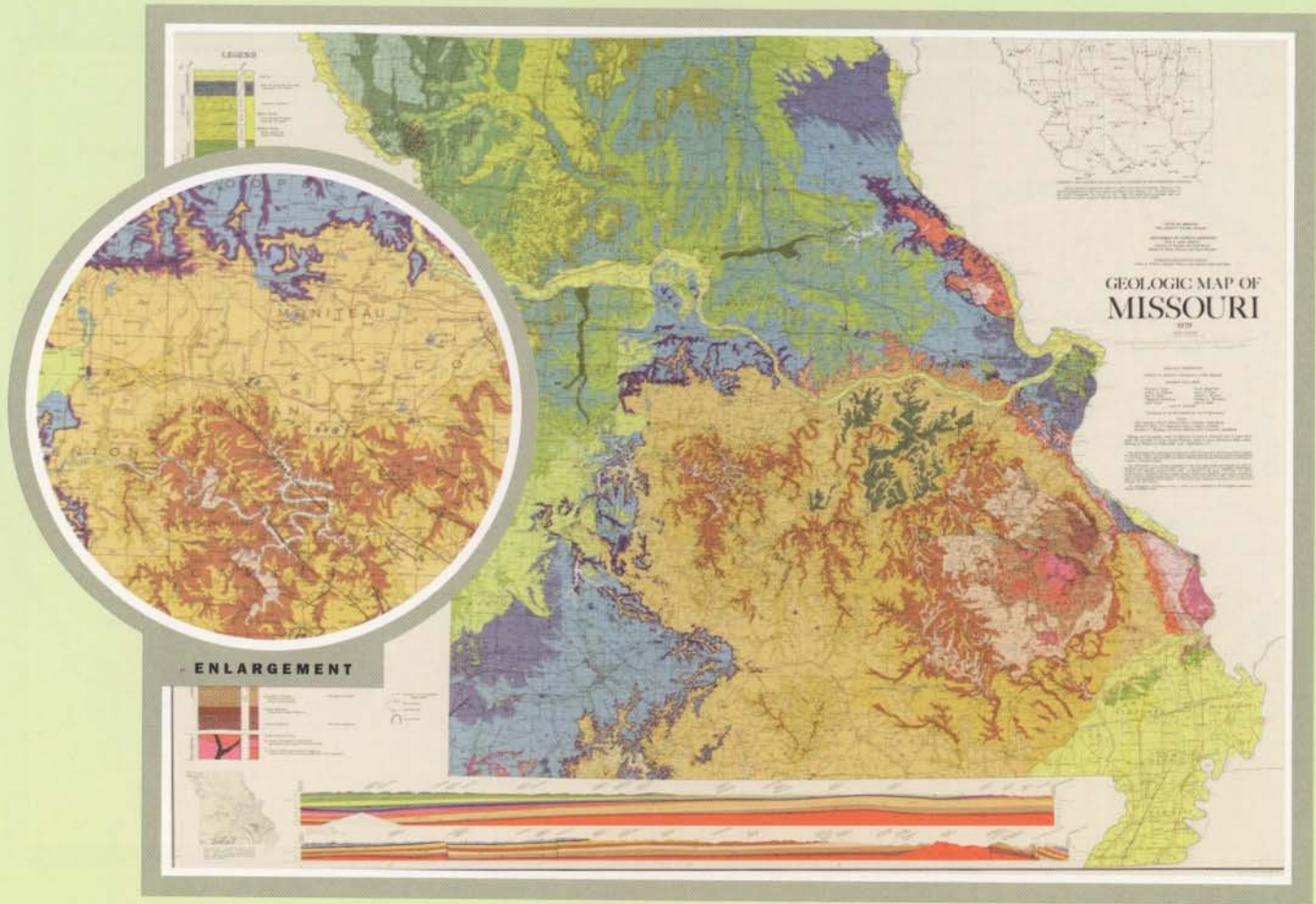
Region Covered

Missouri counties: Bollinger, Cape Girardeau, Mississippi, Perry, Scott, Ste. Genevieve, Stoddard

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402 and Missouri State Emergency Management Agency, P.O. Box 116, Jefferson City, MO 65102

GEOLOGIC MAP OF MISSOURI



Map Description

This map shows the bedrock geology of Missouri except where alluvium is very thick. Rock units are distinguished by type and age. Also shown are faults and the southern limit of glaciation. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

This is a generalized map; thus, site-specific details may differ from those shown.

Title of Map	Geologic Map of Missouri
Author(s)	Kenneth G. Anderson
Date Published	1979
Publication Number	Not Available
Map Coordinates	Not Available
Map Scale	1:500,000
Map Sheet Size	35.5H x 44W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

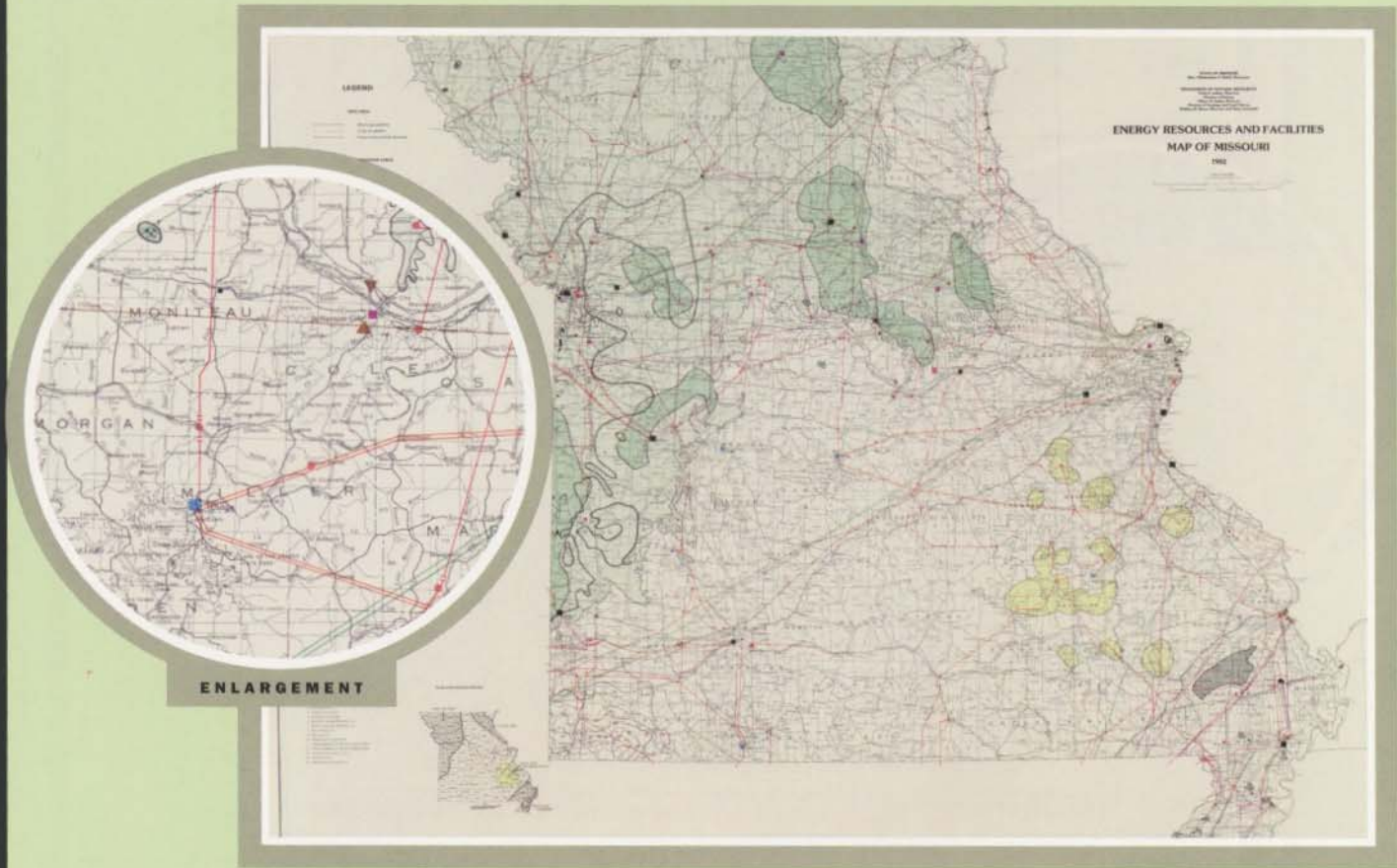


Region Covered
State of Missouri

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402

ENERGY RESOURCES AND FACILITIES MAP OF MISSOURI



Map Description

This map shows the locations of petroleum product pipelines and bulk terminals, electric transmission lines, electric power plants, past, present, and potential oil and gas fields, coal fields and mines, potential geothermal waters and speculative uranium resources. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

Large scale limits use to general planning purposes.

Title of Map	Energy Resources and Facilities Map of Missouri
Author(s)	Not Available
Date Published	1982
Publication Number	Not Available
Map Coordinates	Not Available
Map Scale	1:500,000
Map Sheet Size	41H x 45W inches
Intended Users	Planners, Emergency Managers, Engineers, Geologists, Insurance Professionals

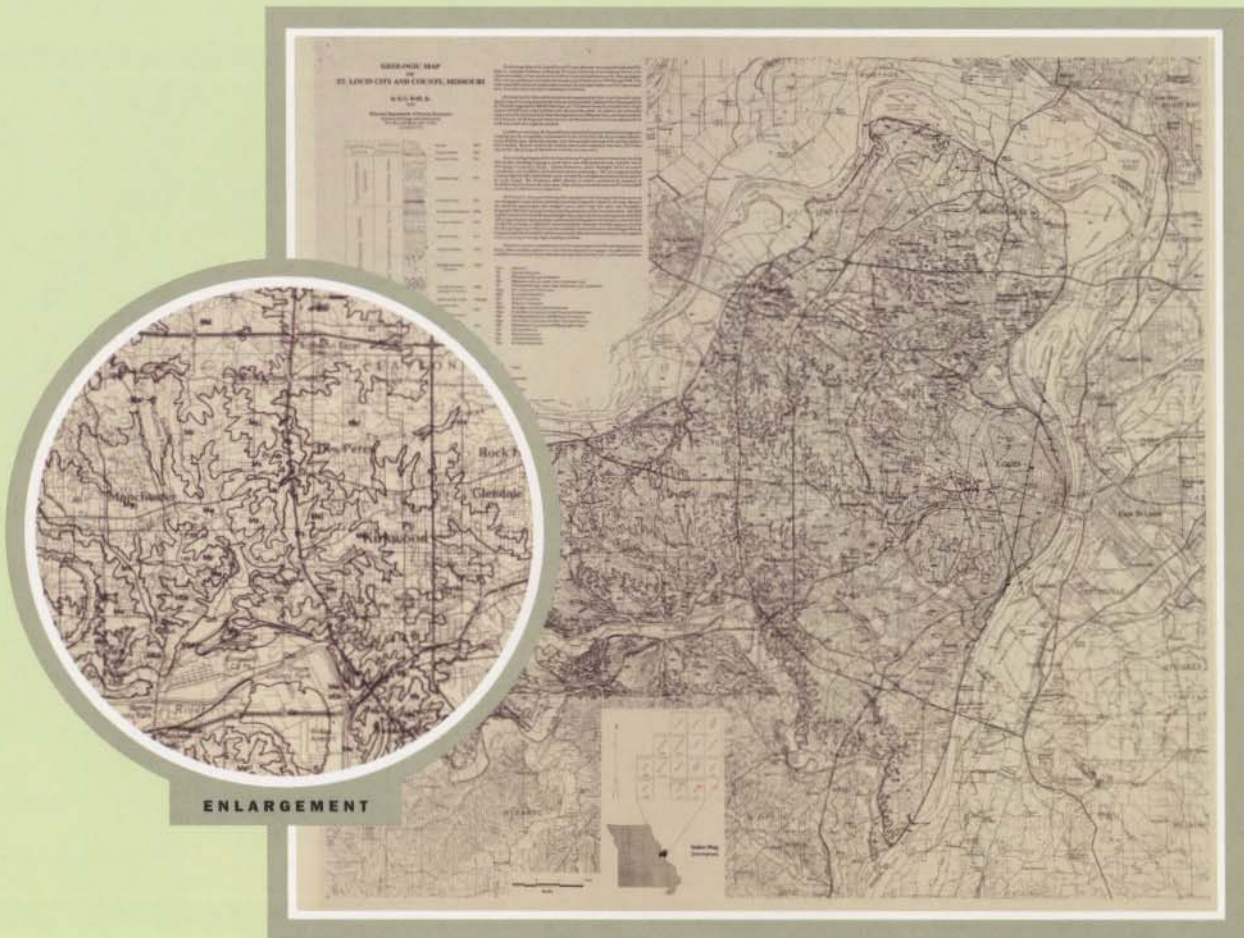


Region Covered
State of Missouri

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402

GEOLOGIC MAP OF ST. LOUIS CITY AND COUNTY, MISSOURI



Map Description

This map shows bedrock geology, thick alluvium and mapped faults. Rock units are distinguished by type and age. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

This is a moderately detailed map; however, site-specific details may differ from those shown.

Note: On the reproduced copy of the map, the map title has been cut off.

Title of Map

Geologic Map of St. Louis City and County, Missouri

Author(s)

K.G. Brill, Jr.

Date Published

1991

Publication Number

Open-File Map OFM-91-259-G1

Map Coordinates

Latitude: 38.38N-38.88N; Longitude: 90.13W-90.75W

Map Scale

1:62,500

Map Sheet Size

38H x 40W inches

Intended Users

Geologists, Geophysicists, Engineers, Planners, Insurance Professionals



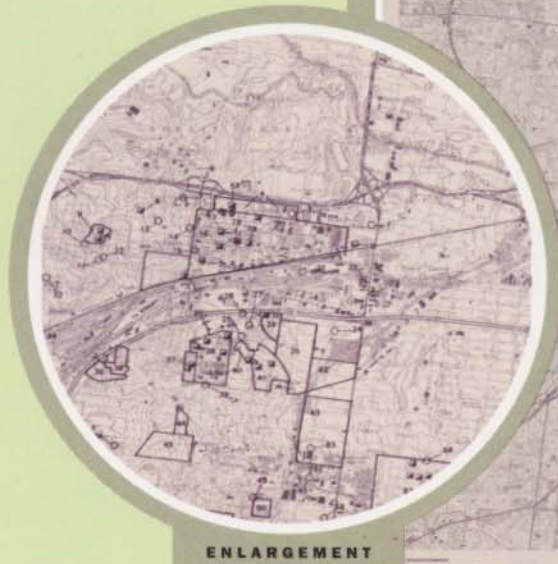
Region Covered

The city of St. Louis and surrounding St. Louis County, MO

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402

UNDERGROUND COAL AND CLAY MINES IN THE CITY OF ST. LOUIS, MISSOURI



ENLARGEMENT



Map Description

This map shows mine entry locations, shaft locations and mined-out areas. Also shown are highways, roads, streets, bridges, railroads, high schools, hospitals and ground elevations. A description of all mines is included.

Limitations

Map compiled from old possibly incomplete records. Some mines may exist but are not shown on the map.

Title of Map

Underground Coal and Clay Mines in the City of St. Louis, Missouri

Author(s)

Mimi Garstang

Date Published

1987

Publication Number

Open File Map OFM-87-238-MR

Map Coordinates

Not Available

Map Scale

Not Available

Map Sheet Size

35H x 56W inches

Intended Users

Planners, Emergency Managers, Engineers, Geologists, Insurance Professionals



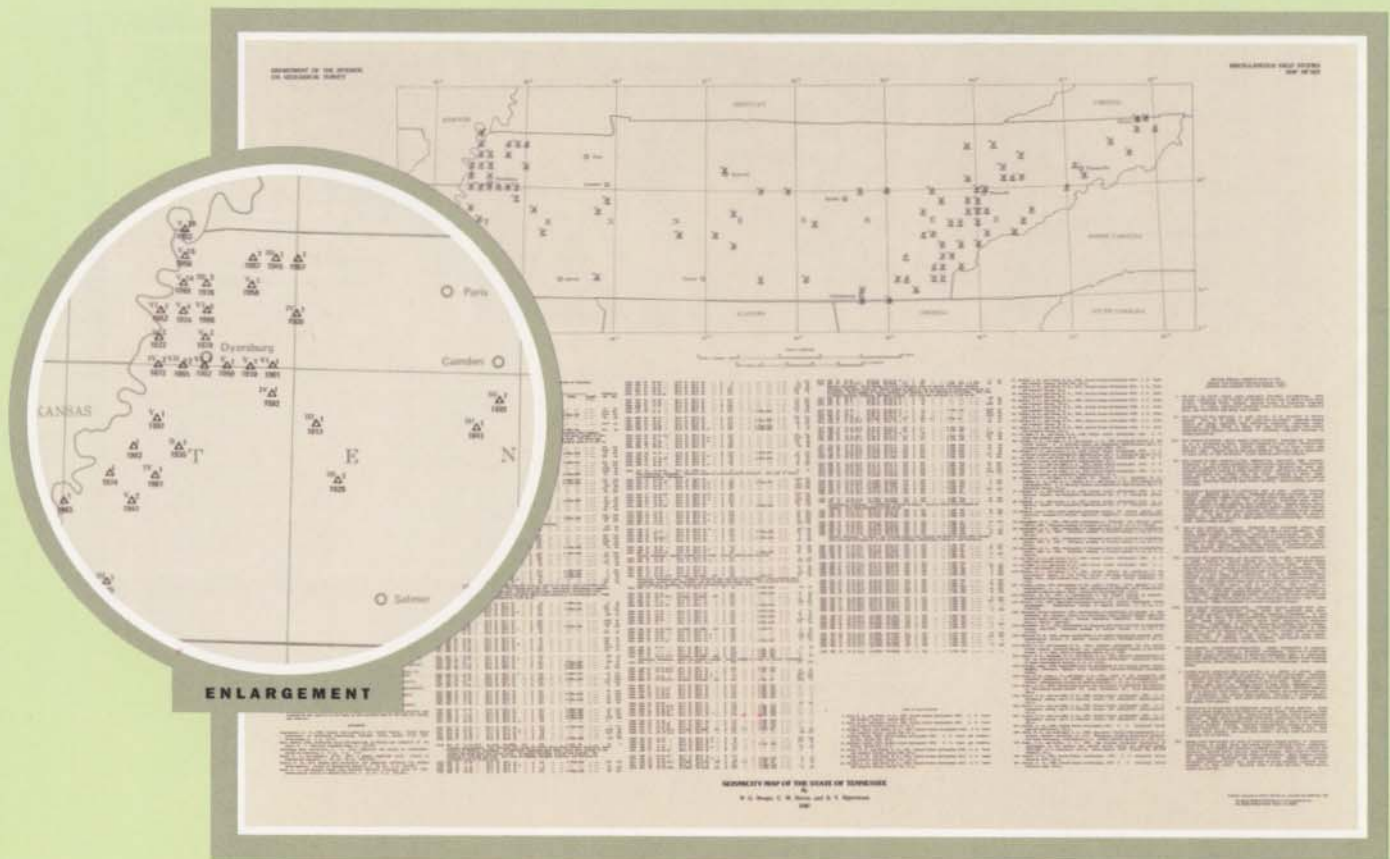
Region Covered

The city of St. Louis and adjacent suburbs

Publisher/Contact Agency

Missouri Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO 65402

SEISMICITY MAP OF THE STATE OF TENNESSEE



Map Description

Shows the locations of epicenters from 1777 to 1983, the number of earthquakes which occurred at each coordinate and the maximum Modified Mercalli Intensity rating associated with the epicenters at the coordinate. Also given in a table are the date, origin time, epicentral location (north latitude, west longitude), depth, hypocenter quality and referenced data sources, magnitude, and Modified Mercalli Intensity and intensity source references for epicenters.

Limitations

Epicenter locations are rounded off to the nearest tenth of a degree of latitude and longitude.

Title of Map

Seismicity Map of the State of Tennessee

Author(s)

C.W. Stover, B.G. Reagor and S.T. Algermissen

Date Published

1987

Publication Number

Miscellaneous Field Studies, Map MF-1157

Map Coordinates

Latitude: 35N-37N; Longitude: 81.5W-90W

Map Scale

1:1,000,000

Map Sheet Size

31.5H x 43.5W inches

Intended Users

General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals



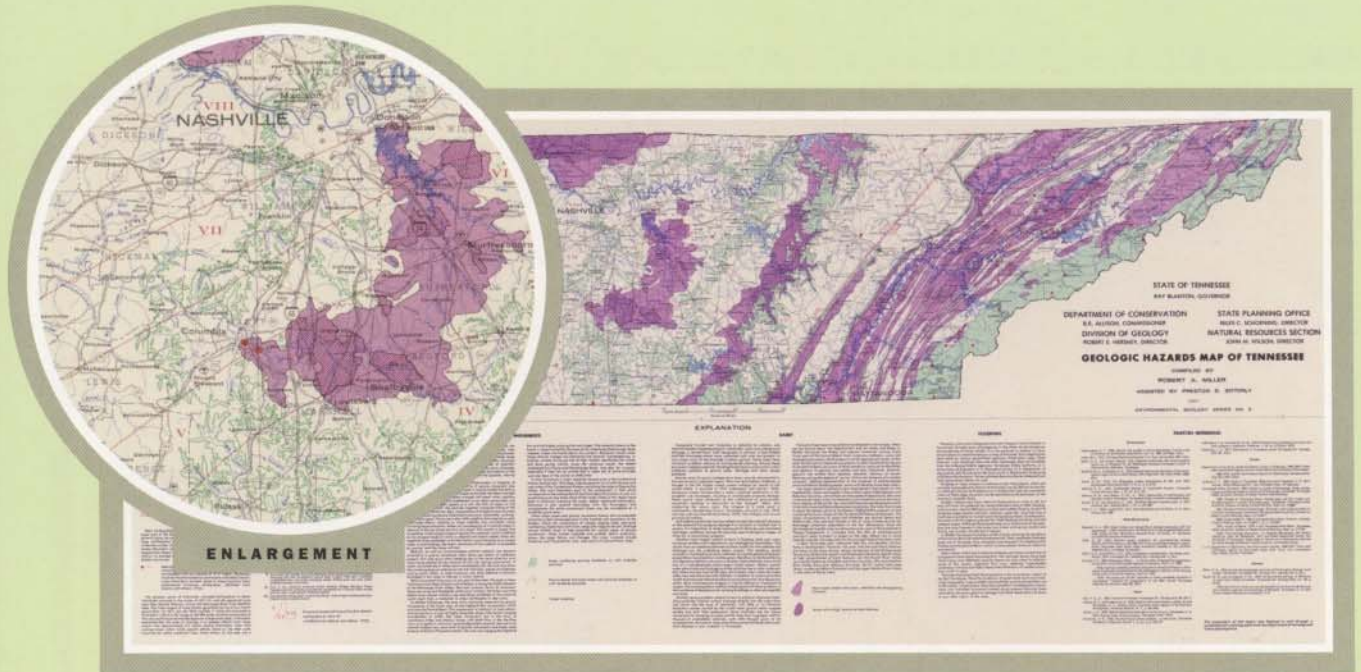
Region Covered

State of Tennessee

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225

GEOLOGIC HAZARDS MAP OF TENNESSEE



Map Description

Shows earthquake, mass movement (landslide) karst (caves, sinkholes, springs, etc.) and flooding hazards for the State of Tennessee.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map	Geologic Hazards Map of Tennessee
Author(s)	Robert A. Miller and Preston D. Sitterly
Date Published	1977
Publication Number	Environmental Geology Series No. 5
Map Coordinates	Not Available
Map Scale	Not Available
Map Sheet Size	24H x 52W inches
Intended Users	General Public, Planners, Emergency Managers, Engineers Geologists, Geophysicists, Insurance Professionals

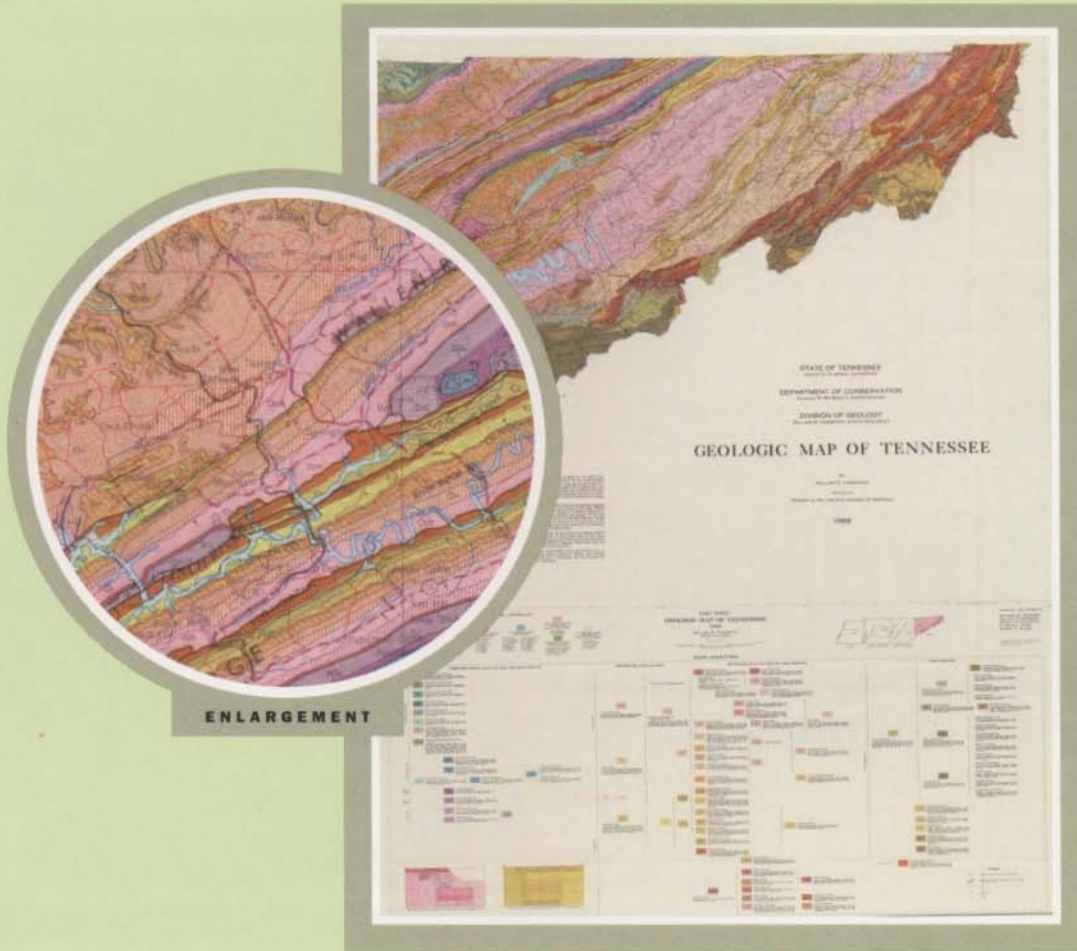


Region Covered
State of Tennessee

Publisher/Contact Agency

Tennessee Department of Environment and Conservation, Division of Geology, Maps and Publications Sales Office, 401 Church Street, 13th Floor, Nashville, TN 37243-0445

GEOLOGIC MAP OF TENNESSEE: EAST SHEET



Map Description

Shows locations of rock units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map	Geologic Map of Tennessee: East Sheet
Author(s)	William D. Hardeman, Robert A. Miller and George D. Swingle
Date Published	1966
Publication Number	Not Available
Map Coordinates	Latitude: 35N-36.7N; Longitude: 80.5W-84W
Map Scale	1:250,000
Map Sheet Size	48.5H x 37W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals



Region Covered
Eastern Tennessee

Publisher/Contact Agency

Tennessee Department of Environment and Conservation, Division of Geology, Maps and Publications Sales Office, 401 Church Street, 13th Floor, Nashville, TN 37243-0445

GEOLOGIC MAP OF TENNESSEE: EAST-CENTRAL SHEET



ENLARGEMENT

Map Description

This map gives the locations of rock units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map	Geologic Map of Tennessee: East-Central Sheet
Author(s)	William D. Hardeman, Robert A. Miller, George D. Swingle, Edward T. Luther, Donald S. Fullerto E. Ronald Sykes and R. Keith Garman
Date Published	1966
Publication Number	Not Available
Map Coordinates	Latitude: 35N-36.6N; Longitude: 84W-86W
Map Scale	1:250,000
Map Sheet Size	50H x 31.5W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals



Region Covered
East-Central Tennessee

Publisher/Contact Agency

Tennessee Department of Environment and Conservation, Division of Geology, Maps and Publications Sales Office, 401 Church Street, 13th Floor, Nashville, TN 37243-0445

GEOLOGIC MAP OF TENNESSEE: WEST-CENTRAL SHEET



Map Description

Shows locations of rock and alluvial units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map	Geologic Map of Tennessee: West-Central Sheet
Author(s)	William D. Hardeman, Robert A. Miller, Donald S. Fullerton, C. Ronald Sykes and R. Keith Garman
Date Published	1966
Publication Number	Not Available
Map Coordinates	Latitude: 35N-36.6N; Longitude: 86W-88W
Map Scale	1:250,000
Map Sheet Size	49H x 31W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

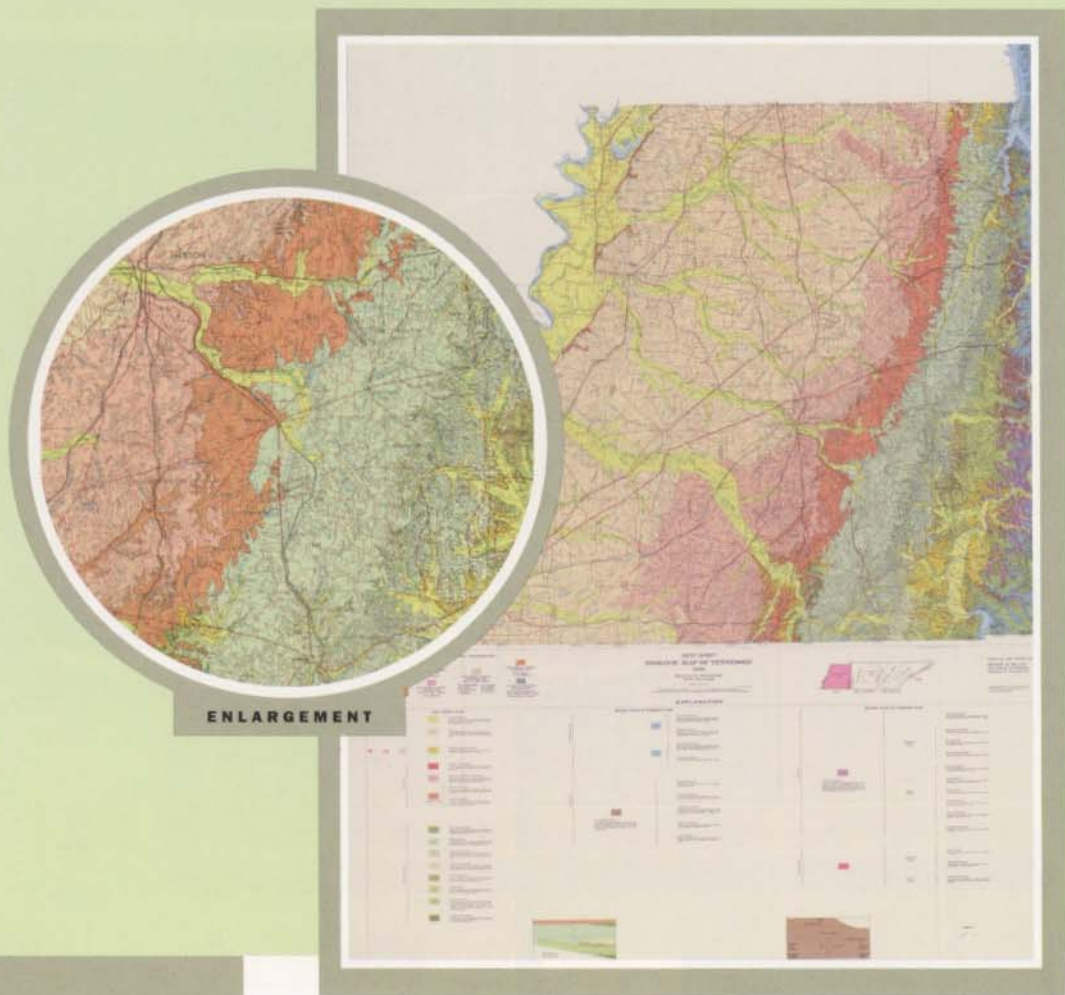


Region Covered
West-Central Tennessee

Publisher/Contact Agency

Tennessee Department of Environment and Conservation, Division of Geology, Maps and Publications Sales Office, 401 Church Street, 13th Floor, Nashville, TN 37243-0445

GEOLOGIC MAP OF TENNESSEE: WEST SHEET



Map Description

Shows locations of rock and alluvial units and principal geologic structures. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map	Geologic Map of Tennessee: West Sheet
Author(s)	William D. Hardeman, Robert A. Miller, Donald S. Fullert
Date Published	1966
Publication Number	Not Available
Map Coordinates	Latitude: 35N-36.6N; Longitude: 88W-90.2W
Map Scale	1:250,000
Map Sheet Size	49H x 36.6W inches
Intended Users	Geologists, Geophysicists, Engineers, Planners, Insurance Professionals

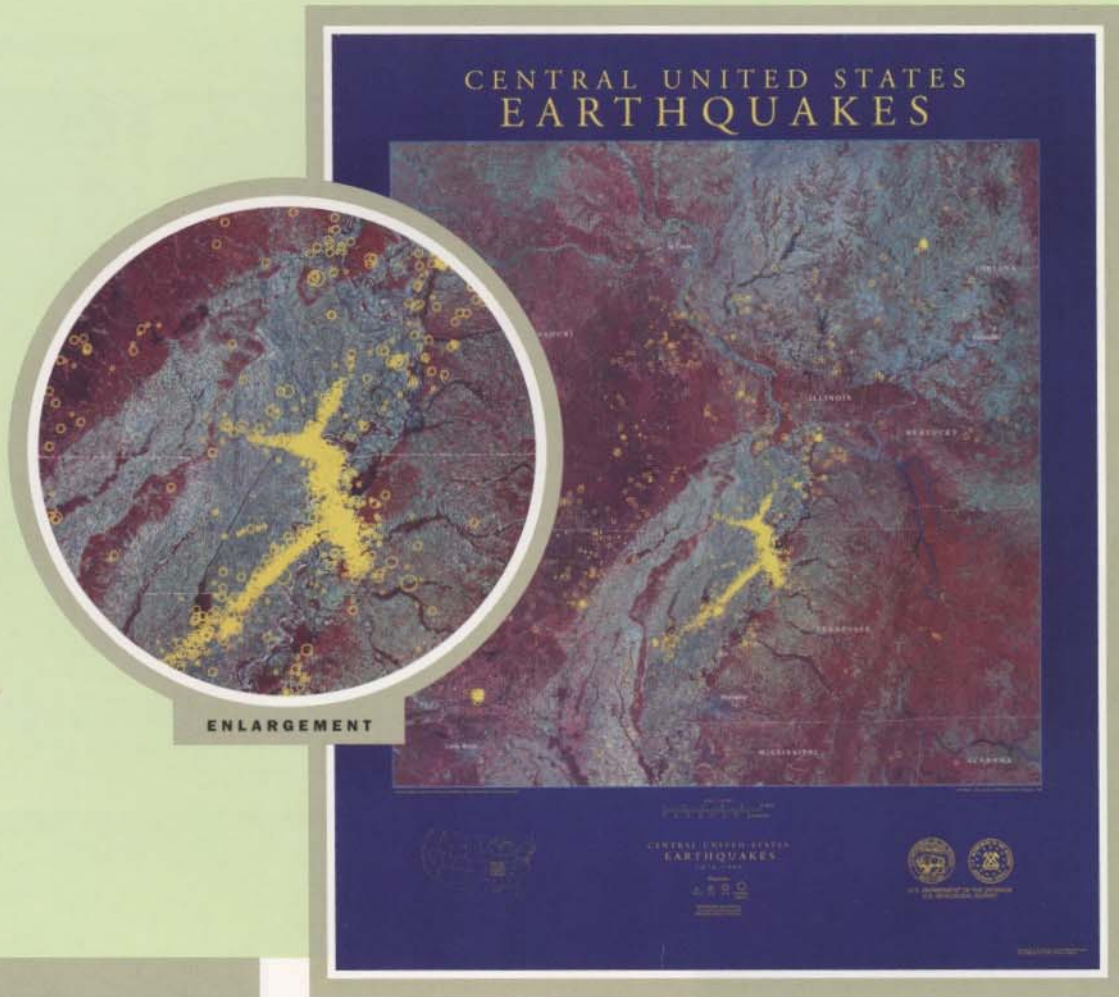


Region Covered
Western Tennessee

Publisher/Contact Agency

Tennessee Department of Environment and Conservation, Division of Geology, Maps and Publications Sales Office, 401 Church Street, 13th Floor, Nashville, TN 37243-0445

CENTRAL UNITED STATES EARTHQUAKES



Map Description

This map shows the locations of earthquake epicenters from 1974 through 1991. The base is a mosaic of false-color Landsat images. State boundaries are marked.

Limitations

Base map does not have cultural features plotted for reference.

Title of Map	Central United States Earthquakes
Author(s)	Not Available
Date Published	1993
Publication Number	Not Available
Map Coordinates	Not Available
Map Scale	1:1,000,000
Map Sheet Size	32H x 26W inches
Intended Users	General Public, Planners, Engineers, Geologists, Insurance Professionals



Region Covered

Southeast Missouri, Southern Illinois, Southwest Indiana, Western Kentucky, Western Tennessee, Northeastern Arkansas

Publisher/Contact Agency

U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225

TYPES OF DAMAGE THAT COULD RESULT FROM A GREAT EARTHQUAKE IN THE NEW MADRID, MISSOURI, SEISMIC ZONE



Map Description

Map sheet consists of photographs from around the world showing the types of earthquake damage that could occur in the New Madrid area. In addition, earthquake survival tips and the seismic history of the New Madrid region are presented. No map is included.

Limitations

Damage photographs shown are not from the New Madrid area but show examples of the types of damage that could occur in the New Madrid area from a large earthquake.

Title of Map

Types of Damage That Could Result From a Great Earthquake in the New Madrid, Missouri, Seismic Zone

Author(s)

Margaret G. Hopper and S.T. Algermissen

Date Published

1984

Publication Number

Miscellaneous Field Studies Map MF-1713

Map Coordinates

Not Available

Map Scale

Not Available

Map Sheet Size

29H x 42W inches

Intended Users

General Public, Planners, Emergency Managers, Engineers, Geologists, Geophysicists, Insurance Professionals



Region Covered

The New Madrid Seismic Zone

Publisher/Contact Agency

U.S. Geological Survey Map Distribution,
Box 25286, Federal Center, Denver, CO
80225

PRELIMINARY SEISMOTECTONIC MAP OF THE CENTRAL MISSISSIPPI VALLEY AND ENVIRONS



Map Description

This map shows locations of earthquake epicenters, faults, and sandblow zones. Also shown are county and state borders, roads, railways, waterways, towns and cities.

Limitations

This is a generalized map; thus, site specific details may differ from those shown.

Title of Map

Preliminary Seismotectonic Map of the Central Mississippi Valley and Environs

Author(s)

A.V. Heyl and F.A. McKeown

Date Published

1978

Publication Number

Miscellaneous Field Studies, Map MF-1011, Sheet 1 of 2

Map Coordinates

Latitude: 35N-39N; Longitude: 87W-92W

Map Scale

1:250,000

Map Sheet Size

41H x 49W inches

Intended Users

Geologists, Geophysicists, Insurance Professionals



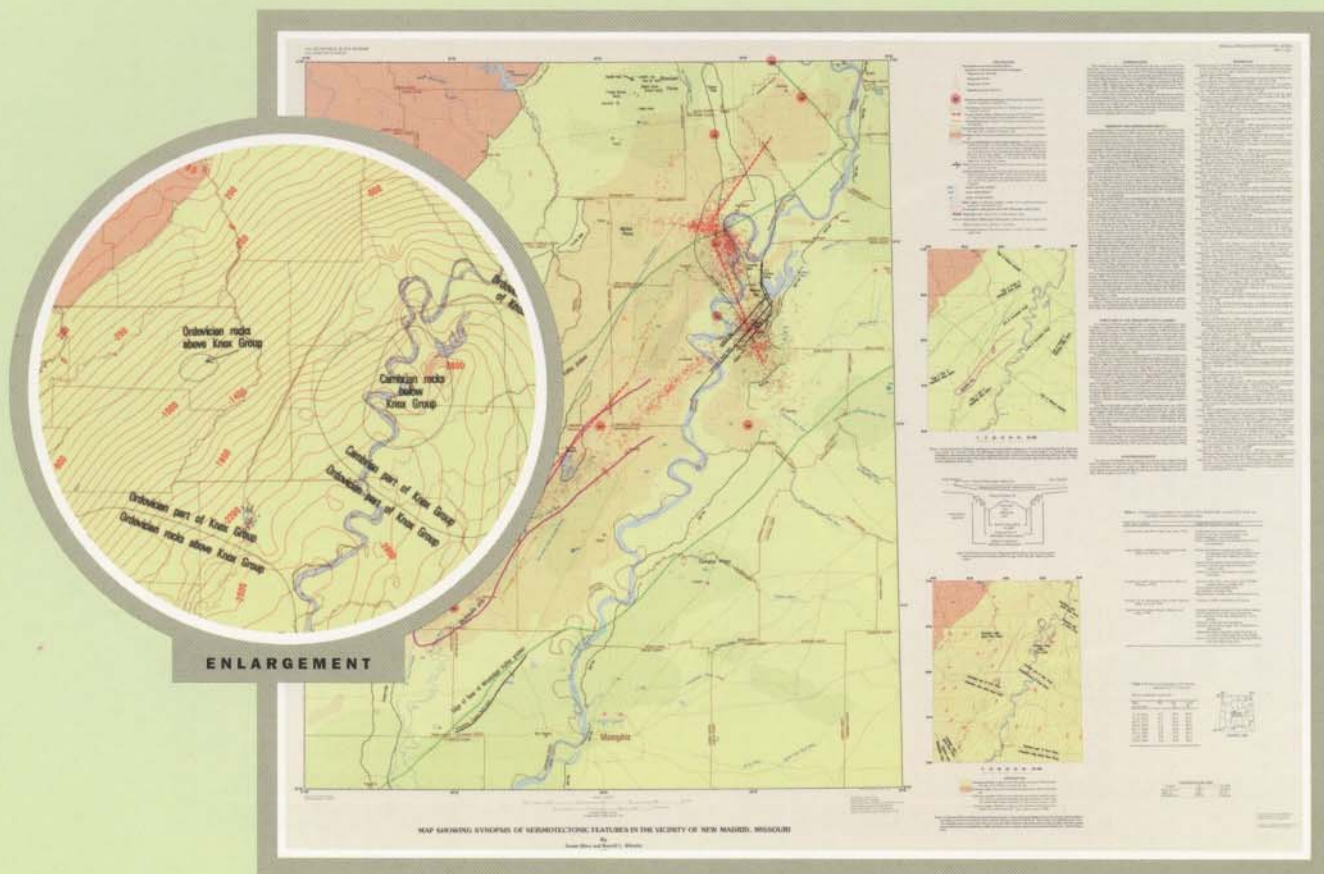
Region Covered

Southeast Missouri, Southern Illinois, Southwest Indiana, Western Kentucky, Western Tennessee, Northeastern Arkansas

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

MAP SHOWING SYNOPSIS OF SEISMOTECTONIC FEATURES IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of seismotectonic maps of the New Madrid area in southeast Missouri and adjacent parts of Arkansas, Kentucky, and Tennessee whose purpose is to help assess the seismic hazards in the area. It shows geologic and geophysical information selected from other maps in the series to provide a framework of seismicity, its geologic effects, and local geologic structure. This map shows faults, drill holes, earthquake epicenters, areas of 1811-1812 sandblows, 1811-1812 energy release centers, lineaments from aerial photos and space imagery, generalized rock type distributions, river geomorphology anomalies and geologic structures inferred from geophysical data. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Map Showing Synopsis of Seismotectonic Features in the Vicinity of New Madrid, Missouri

Author(s)

Susan Rhea and Russell L. Wheeler

Date Published

1995

Publication Number

Miscellaneous Investigations Series, Map I-2521

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

40H x 50W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals

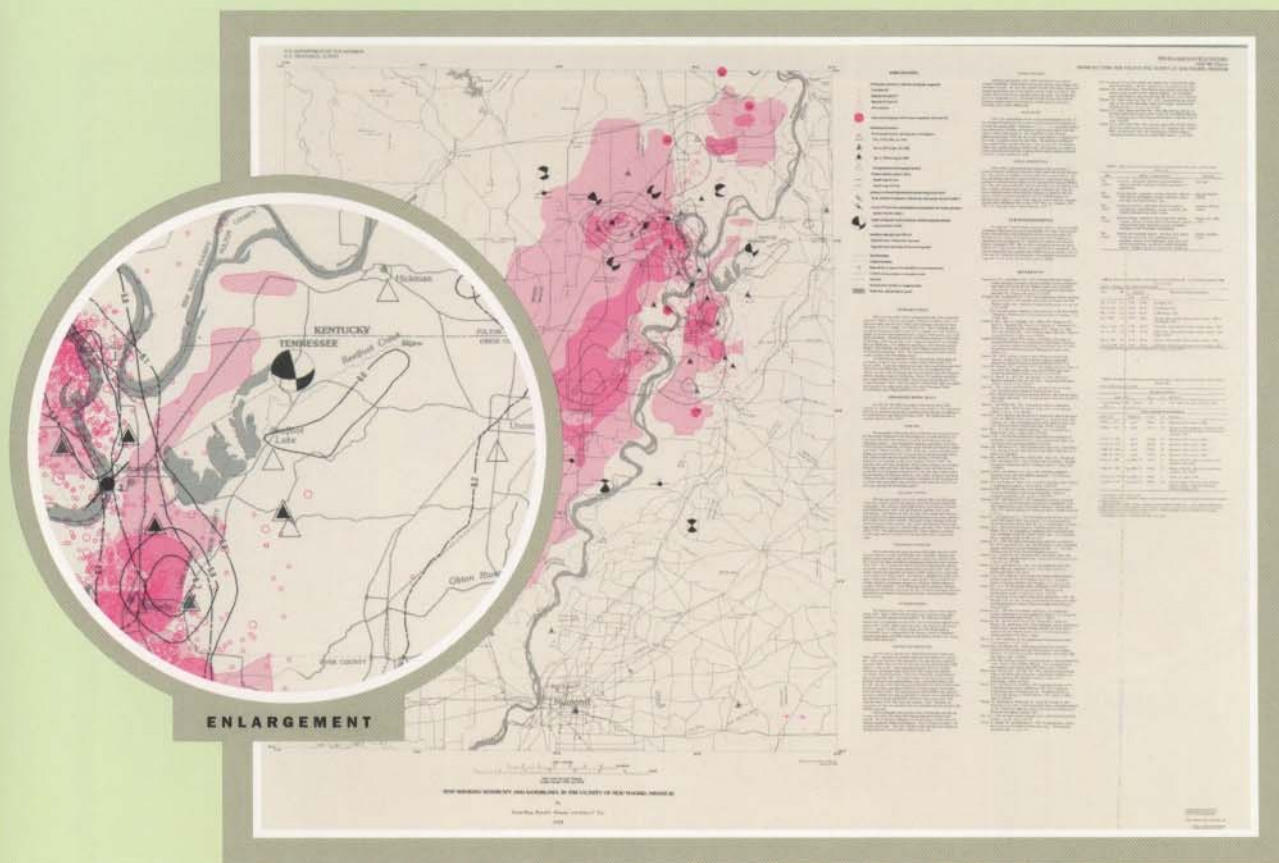
Region Covered

Tennessee counties: Hardeman, Fayette, Shelby, Tipton, Haywood, Madison, Crockett, Lauderdale, Dyer, Obion. Kentucky counties: Fulton, Hickman, Carlisle. Arkansas counties: St. Francis, Crittenden, Cross, Poinsett, Mississippi, Craighead, Greene, Clay, Lawrence, Randolph. Missouri counties: Dunklin, Pemiscot, New Madrid, Butler, Ripley, Carter, Wayne, Stoddard, Mississippi, Scott

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SEISMOTECTONIC MAP FOLIO IN THE VICINITY OF NEW MADRID, MISSOURI, MAP SHOWING SEISMICITY AND SANDBLOWS IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of five seismotectonic maps in the vicinity of the New Madrid seismic zone. The theme of this map is seismicity. It shows earthquake epicenters, selected focal mechanisms, maximum horizontal stress directions, seismic velocities, seismograph and accelerograph locations, and sand blow distribution from the 1811-1812 earthquakes. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Seismotectonic Map Folio in the Vicinity of New Madrid, Missouri, Map Showing Seismicity and Sandblows in the Vicinity of New Madrid, Missouri

Author(s)

Susan Rhea, Russell L. Wheeler and Arthur C. Tarr

Date Published

1994

Publication Number

Miscellaneous Field Studies Map MF-2264-A

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

28.5H x 35W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



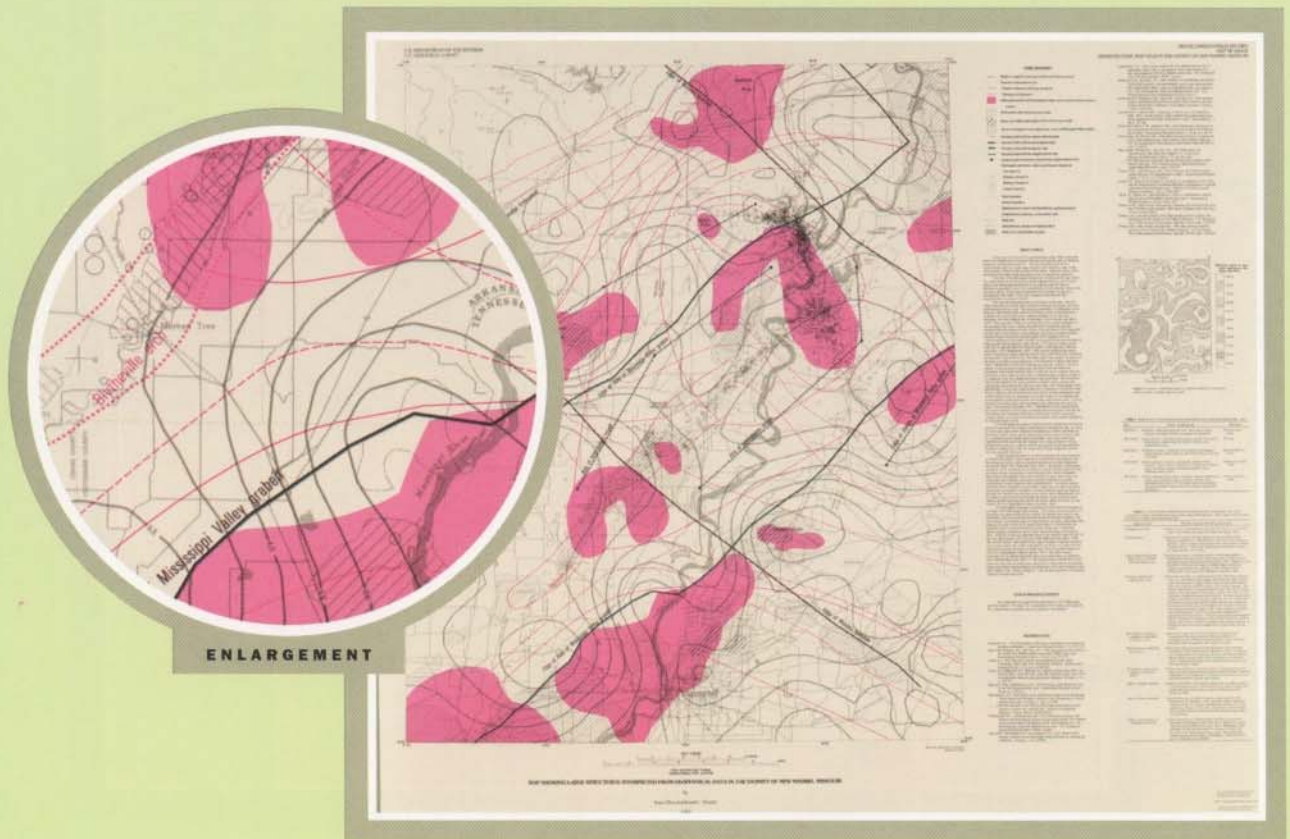
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SEISMOTECTONIC MAP FOLIO IN THE VICINITY OF NEW MADRID, MISSOURI, MAP SHOWING LARGE STRUCTURES INTREPRETED FROM GEOPHYSICAL DATA IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of five seismotectonic maps in the vicinity of the New Madrid seismic zone. The theme of this map is crustal structure. It shows earthquake epicenters, and large structures inferred from gravity, aeromagnetic, seismic reflection, seismic refraction, and magnetotelluric data. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Seismotectonic Map Folio in the Vicinity of New Madrid, Missouri, Map Showing Large Structures Interpreted from Geophysical Data in the Vicinity of New Madrid, Missouri

Author(s)

Susan Rhea, Russell L. Wheeler

Date Published

1994

Publication Number

Miscellaneous Field Studies Map MF-2264-B

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

28.5H x 35W inches

Intended Users

Geologists, Geophysicists, Insurance Professionals



Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SEISMOTECTONIC MAP FOLIO IN THE VICINITY OF NEW MADRID, MISSOURI, MAP SHOWING LOCATIONS OF GEOPHYSICAL SURVEY AND MODELING LINES IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of five seismotectonic maps in the vicinity of the New Madrid seismic zone. The theme of this map is geophysical surveys. It shows the locations of geophysical surveys that resulted in interpreted cross sections. Shown are lines of gravity, aeromagnetic, magnetotelluric, seismic reflection and seismic refraction surveys. Excluded are most of the petroleum industries' seismic reflection lines and also short, shallow, high resolution seismic reflection lines. Other information includes earthquake epicenters, state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Seismotectonic Map Folio in the Vicinity of New Madrid, Missouri, Map Showing Locations of Geophysical Survey and Modeling Lines in the Vicinity of New Madrid, Missouri

Author(s)

Susan Rhea and Russell L. Wheeler

Date Published

1994

Publication Number

Miscellaneous Field Studies Map MF-2264-C

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

28.5H x 35W inches

Intended Users

Geologists, Geophysicists, Insurance Professionals



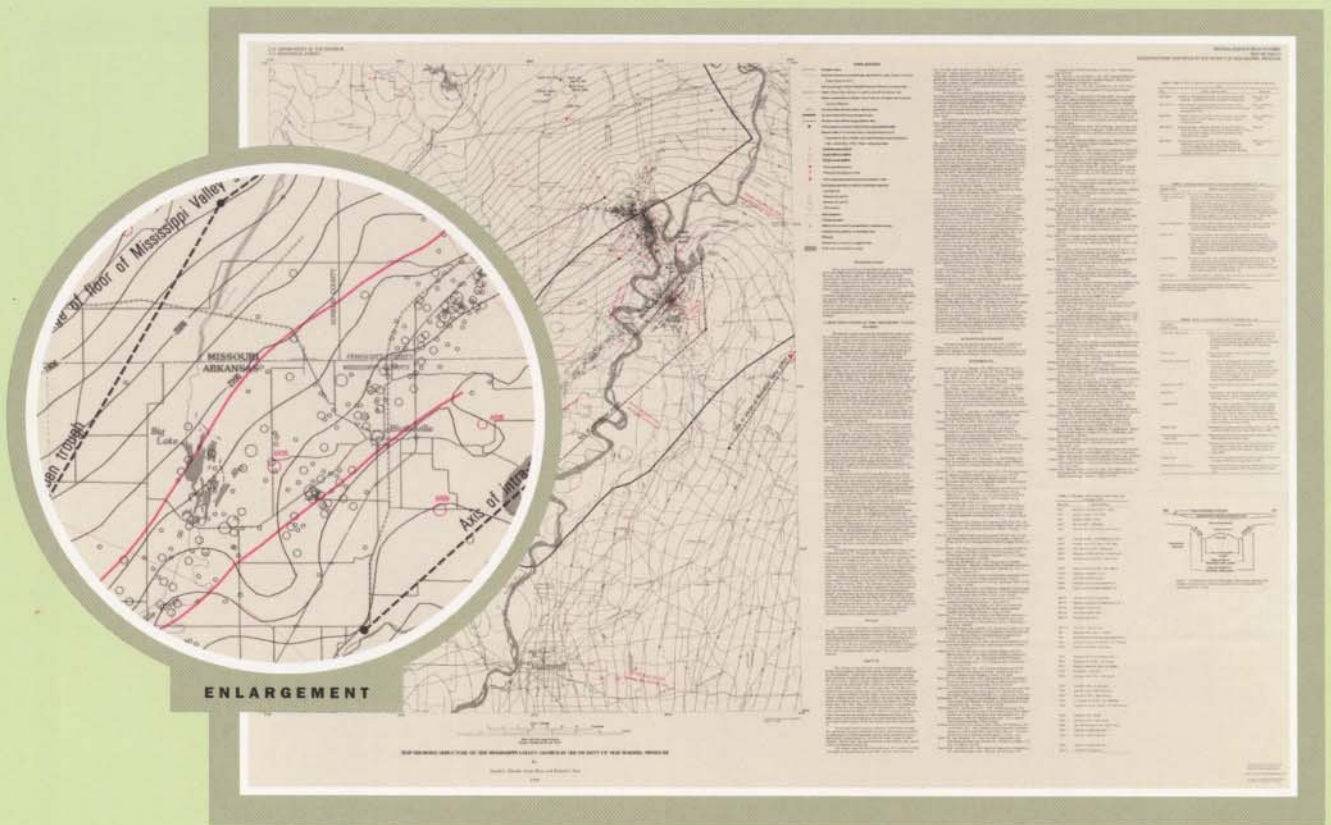
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SEISMOTECTONIC MAP FOLIO IN THE VICINITY OF NEW MADRID, MISSOURI, MAP SHOWING STRUCTURE OF THE MISSISSIPPI VALLEY GRABEN IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of five seismotectonic maps in the vicinity of the New Madrid seismic zone. The theme of this map is bedrock geology. It shows earthquake epicenters, geologic and subcrop contacts, structure contours, radon concentrations, selected wells, selected faults and arches, troughs and faulted boundaries of the Mississippi Valley graben. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Seismotectonic Map Folio in the Vicinity of New Madrid, Missouri, Map Showing Structure of the Mississippi Valley Graben in the Vicinity of New Madrid, Missouri

Author(s)

Russell L. Wheeler, Susan Rhea and Richard L. Dart

Date Published

1994

Publication Number

Miscellaneous Field Studies Map MF-2264-D

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

28.5H x 35W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



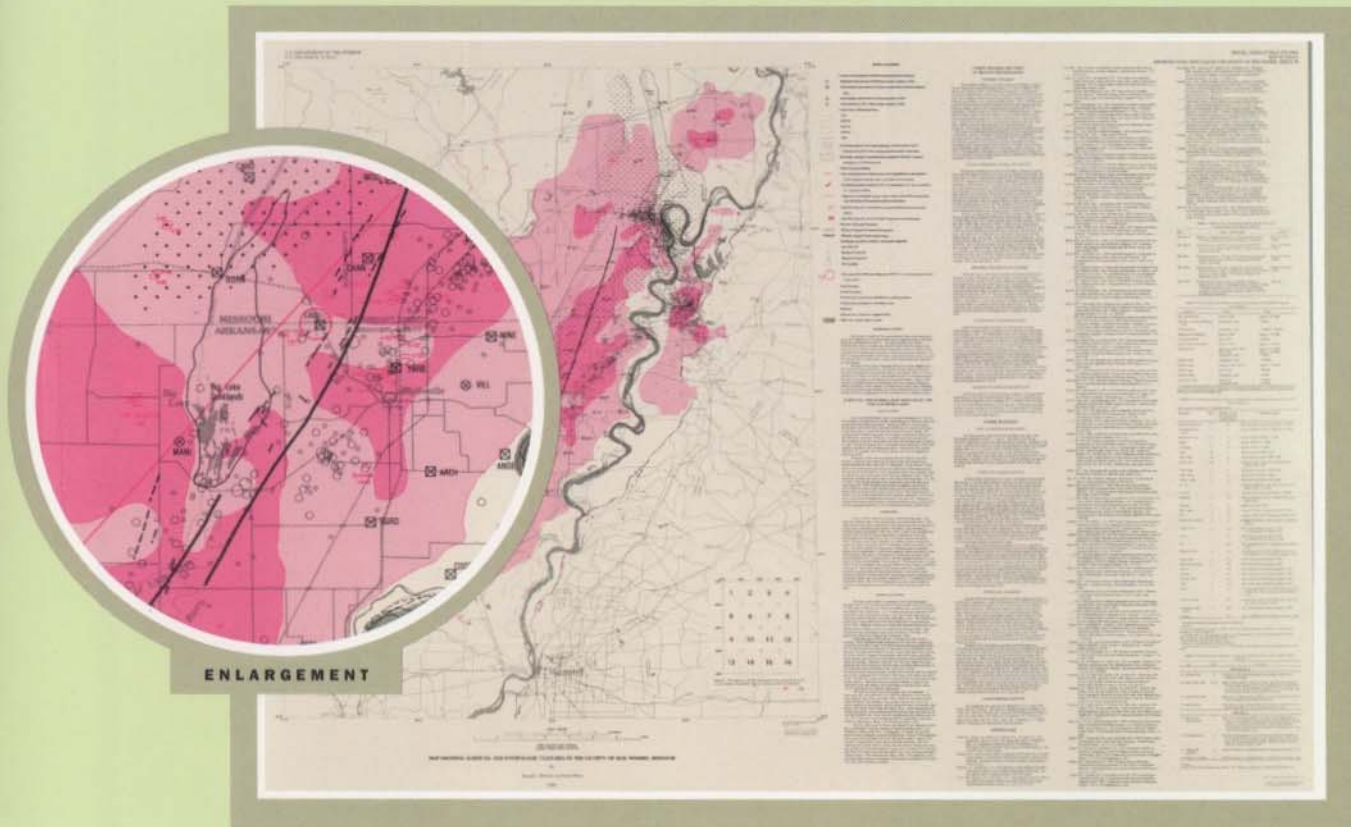
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SEISMOTECTONIC MAP FOLIO IN THE VICINITY OF NEW MADRID,
MISSOURI, MAP SHOWING SURFICIAL AND HYDROLOGIC
FEATURES IN THE VICINITY OF NEW MADRID, MISSOURI



Map Description

This is one of a series of five seismotectonic maps in the vicinity of the New Madrid seismic zone. The focus of this map is earthquake effects from the 1811-1812 earthquakes and possibly previous earthquakes. It shows earthquake epicenters, Global Positioning System stations, river morphology anomalies, ground water hydrology anomalies, liquefaction study sites, probable 1811-1812 landslides, 1811-1812 energy release centers, sand blow density distributions and lineaments mapped from aerial photographs and satellite imagery. Other information includes state and county boundaries, cities and towns, railroads, roadways and waterways.

Limitations

None

Title of Map

Seismotectonic Map Folio in the Vicinity of New Madrid, Missouri, Map Showing Surficial and Hydrologic Features in the Vicinity of New Madrid, Missouri

Author(s)

Russell L. Wheeler and Susan Rhea

Date Published

1994

Publication Number

Miscellaneous Field Studies Map MF-2264-E

Map Coordinates

Latitude: 35N-37N; Longitude: 89W-91W

Map Scale

1:250,000

Map Sheet Size

28.5H x 35W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



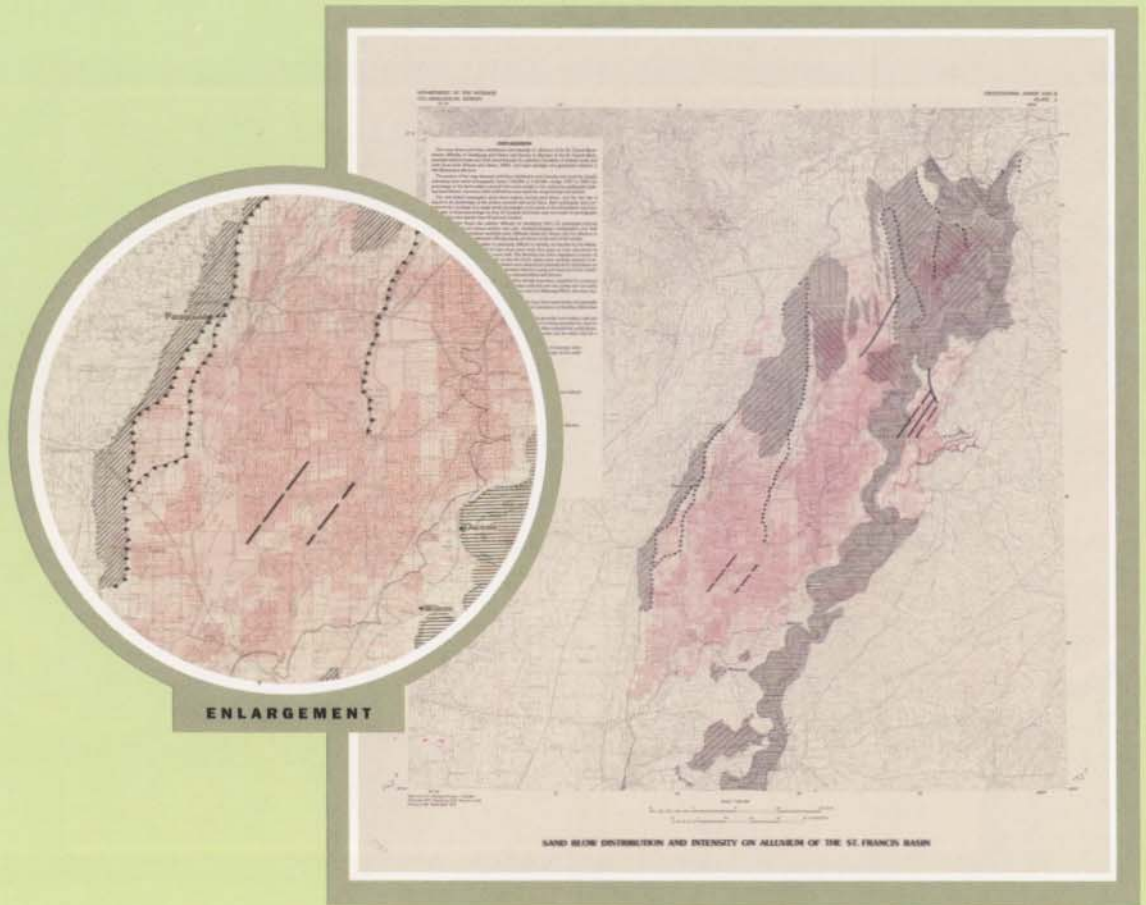
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

SAND BLOW DISTRIBUTION AND INTENSITY ON ALLUVIUM OF THE ST. FRANCIS BASIN



Map Description

This map shows sand blow distribution and intensity on alluvium of the St. Francis Basin, relative difficulty of identifying sand blows and fissures in alluvium of the St. Francis Basin, principal inferred faults and fault zones beneath the alluvium and major geologic and geographic features in late Quaternary alluvium. Also shown are roads, towns, county and state boundaries, rivers and topographic contours.

Limitations

Not for detailed, site-specific use.

Title of Map

Sand Blow Distribution and Intensity on Alluvium of the St. Francis Basin

Author(s)

Stephen F. Obermeier

Date Published

1989

Publication Number

Professional Paper 1336-B, PLATE 1

Map Coordinates

Latitude: 35N-37.25N; Longitude: 89W-91.5W

Map Scale

1:500,000

Map Sheet Size

27H x 24W inches

Intended Users

Geologists, Engineers, Planners, Emergency Management, Insurance Professionals



Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

FISSURES LONGER THAN 0.8 KM, ST. FRANCIS BASIN



Map Description

This map shows locations of fissures longer than 0.8 km induced by earthquake shaking in alluvium of the St. Francis Basin. These fissures are presumed to be caused by the 1811-12 earthquakes. Also shown are roads, towns, county and state boundaries, rivers and topographic contours.

Limitations

Not for detailed, site-specific use.

Title of Map

Fissures Longer than 0.8 KM, St. Francis Basin

Author(s)

Stephen F. Obermeier

Date Published

1989

Publication Number

Professional Paper 1336-B, PLATE 2

Map Coordinates

Latitude: 35N-37.25N; Longitude: 89W-91.5W

Map Scale

1:500,000

Map Sheet Size

27H x 24W inches

Intended Users

Geologists, Engineers, Emergency Managers, Insurance Professionals



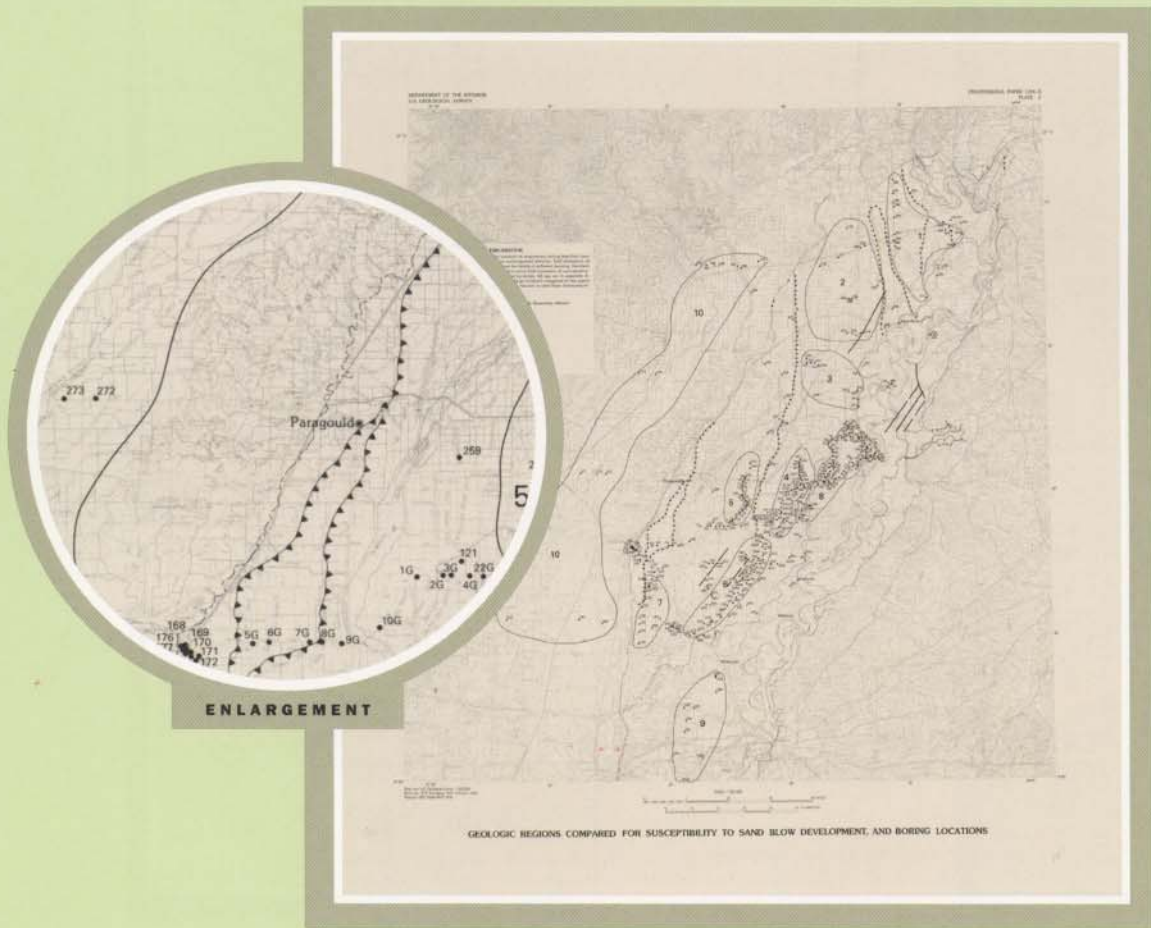
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

GEOLOGIC REGIONS COMPARED FOR SUSCEPTIBILITY TO SAND BLOW DEVELOPMENT AND BORING LOCATIONS



Map Description

Numbers on the map show the locations of engineering boring logs that have Standard Penetration Test blow counts on course-grained alluvium, field evaluation of soil classification and information regarding sediment layering. The map also shows boundaries of ten regions compared in this report for evaluation of engineering and geologic factors relevant to sand blow development. Also shown are roads, towns, county and state boundaries, rivers and topographic contours.

Limitations

Not for detailed, site-specific use.

Title of Map

Geologic Regions Compared for Susceptibility to Sand Blow Development and Boring Locations

Author(s)

Stephen F. Obermeier

Date Published

1989

Publication Number

Professional Paper 1336-B, PLATE 3

Map Coordinates

Latitude: 35N-37.25N; Longitude: 89W-91.5W

Map Scale

1:500,000

Map Sheet Size

27H x 24W inches

Intended Users

Geologists, Engineers, Insurance Professionals



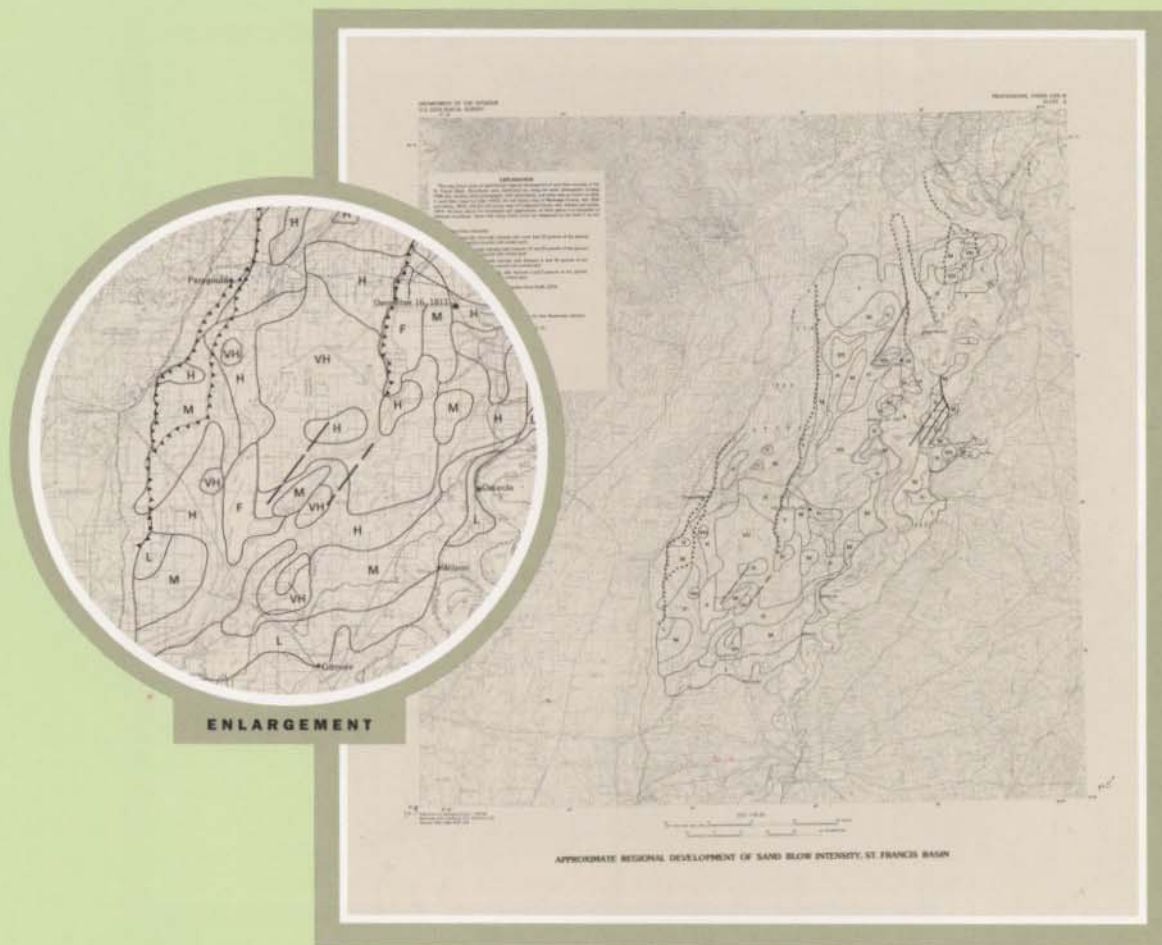
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

APPROXIMATE REGIONAL DEVELOPMENT OF SAND BLOW INTENSITY, ST. FRANCIS BASIN



Map Description

This map shows areas of approximate regional development of sand blow intensity in the St. Francis Basin. Boundaries were determined by using old (vintage 1938-41) and modern aerial photographs, field observations, sand blow distribution maps by Fuller (1912), soil survey maps and other data.

Limitations

Not for detailed, site-specific use. At many places the boundaries are approximate and at other places it is impossible to delineate boundaries.

Title of Map

Approximate Regional Development of Sand Blow Intensity, St. Francis Basin

Author(s)

Stephen F. Obermeier

Date Published

1989

Publication Number

Professional Paper 1336-B, PLATE 8

Map Coordinates

Latitude: 35N-37.25N; Longitude: 89W-91.5W

Map Scale

1:500,000

Map Sheet Size

27H x 24W inches

Intended Users

Geologists, Engineers, Emergency Managers, Insurance Professionals



Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

MODERN EPICENTERS, SAND BLOWS, AND POSSIBLE ENERGY CENTERS, DECEMBER 16, 1811 AND FEBRUARY 7, 1812 EARTHQUAKES



Map Description

This map shows the relations of modern epicenters, sand blow development, and possible energy centers for the December 16, 1811 and February 7, 1812 earthquakes. Also shown are roads, towns, county and state boundaries, rivers and topographic contours.

Limitations

Not for detailed, site-specific use.

Title of Map

Modern Epicenters, Sand Blows, and Possible Energy Centers, December 16, 1811 and February 7, 1812 Earthquakes

Author(s)

Stephen F. Obermeier

Date Published

1989

Publication Number

Professional Paper 1336-B, PLATE 11

Map Coordinates

Latitude: 35N-37.25N; Longitude: 89W-91.5W

Map Scale

1:500,000

Map Sheet Size

27H x 24W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



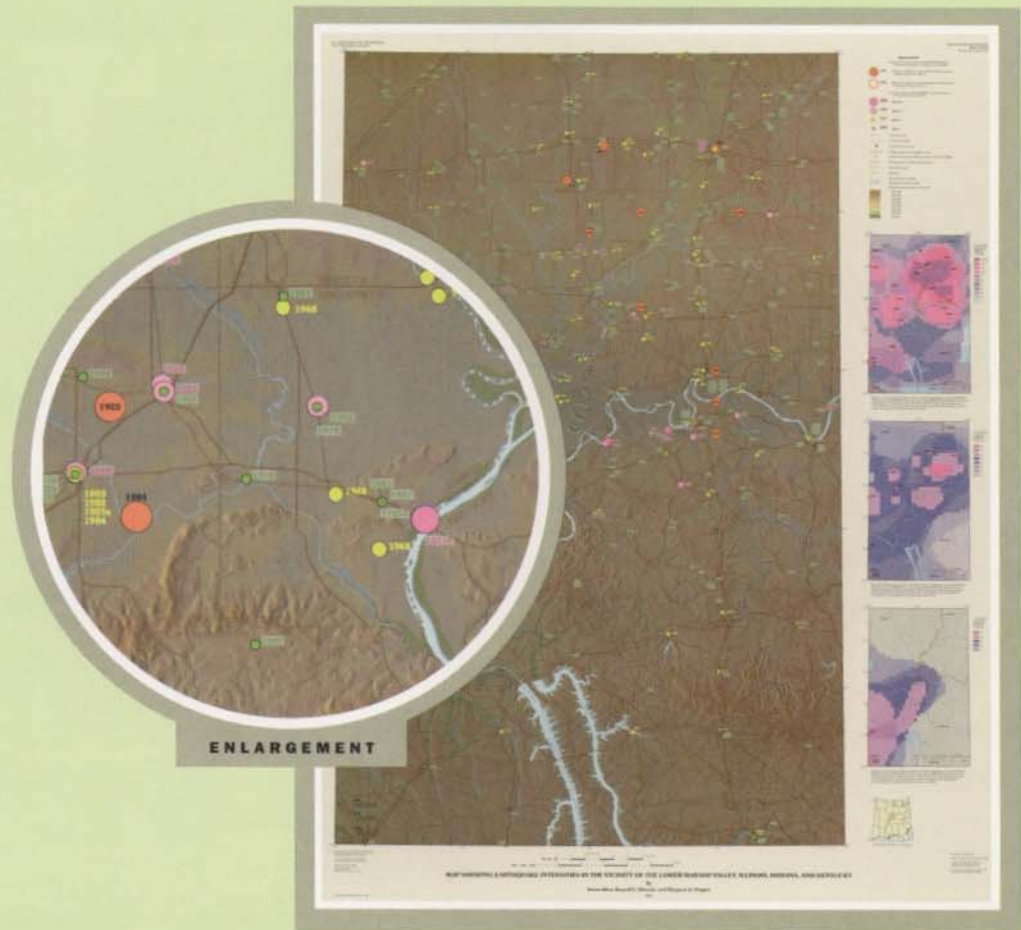
Region Covered

Western Tennessee, Western Kentucky, Northeast Arkansas, Southeast Missouri

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

MAP SHOWING EARTHQUAKE INTENSITIES IN THE VICINITY OF THE LOWER WABASH VALLEY, ILLINOIS, INDIANA, AND KENTUCKY



Map Description

This map shows the reported maximum Modified Mercalli Intensities of historic earthquakes in the map region. Dates and maximum intensities at reporting sites are shown. The base is a shaded relief map and all state and county boundaries, rivers, lakes, roads and highways are shown. Three smaller accompanying maps on the same sheet show the estimated cumulative number of historical shakings of at least Modified Mercalli Intensity VI, VII, or VIII.

Limitations

None

Title of Map

Map Showing Earthquake Intensities in the Vicinity of the Lower Wabash Valley, Illinois, Indiana, and Kentucky

Author(s)

Susan Rhea, Russell L. Wheeler and Margaret G. Hopper

Date Published

1996

Publication Number

Geologic Investigations Map I-2583-B

Map Coordinates

Latitude: 36.5N-39N; Longitude: 87W-89W

Map Scale

1:250,000

Map Sheet Size

50H x 40W inches

Intended Users

Geologists, Geophysicists, Engineers, Insurance Professionals



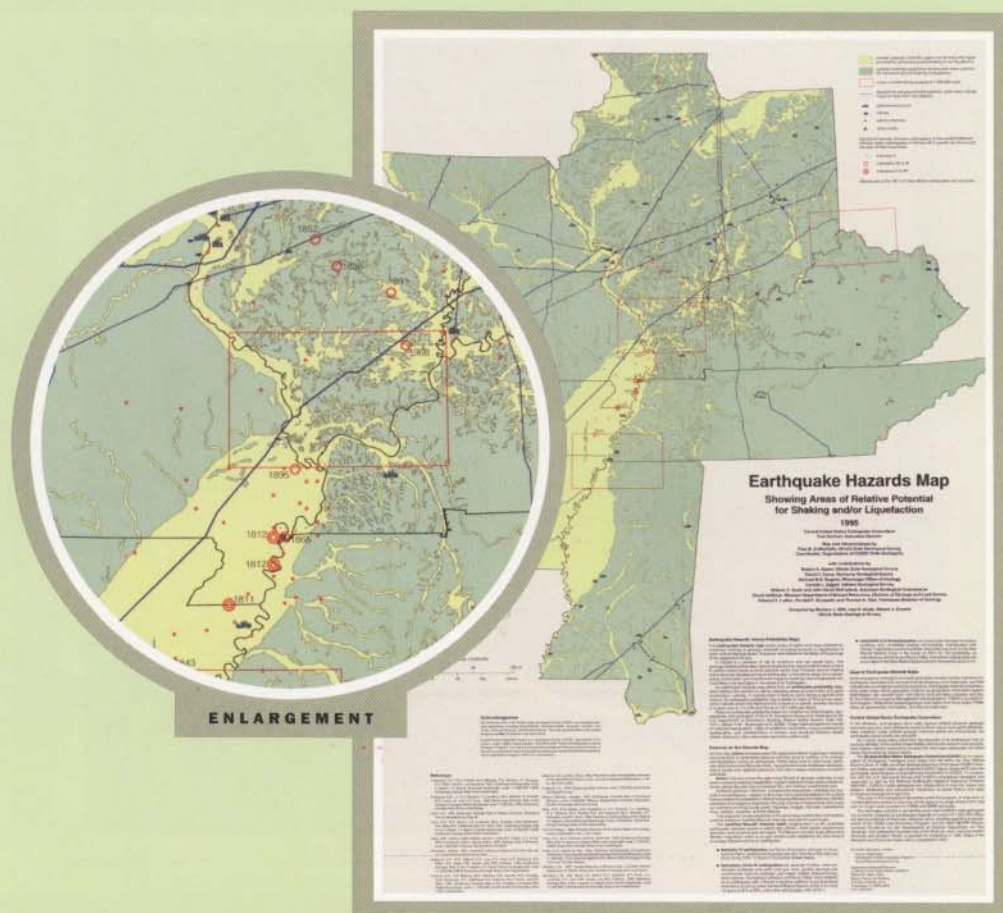
Region Covered

Southeast Illinois, Southwest Indiana, Northwest Kentucky

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

EARTHQUAKE HAZARDS MAP SHOWING AREAS OF RELATIVE POTENTIAL FOR SHAKING AND /OR LIQUEFACTION



Map Description

This earthquake hazards map shows areas of higher and lower potential for enhanced shaking of geologic materials (including bedrock) or liquefaction of loose surficial deposits (soils). The areas were defined on the basis of bedrock geology and sediments in the uppermost 50 feet. The map also shows selected oil and gas products pipelines, petrochemical plants, refineries, pipeline terminals, state capitols and epicenters of historical earthquakes with epicentral intensities greater than Modified Mercalli Intensity VI.

Limitations

The mapping of shaking potential areas is very general, and therefore this map is not appropriate for site-specific use.

Title of Map

Earthquake Hazards Map Showing Areas of Relative Potential for Shaking and/or Liquefaction

Author(s)

Paul B. DuMontelle, Robert A. Bauer, Daniel I. Carey, Michael B.E. Bograd, William V. Bush, John David McFarland, David Hoffman, Edward T. Luther, Ronald P. Zurawski and Thomas A. Hart

Date Published

1995

Publication Number

Not Available

Map Coordinates

Not Available

Map Scale

1:2,000,000

Map Sheet Size

35.5H x 25.5W inches

Intended Users

Emergency Managers, Planners, Elected Officials, Engineers, Geologists, Insurance Professionals



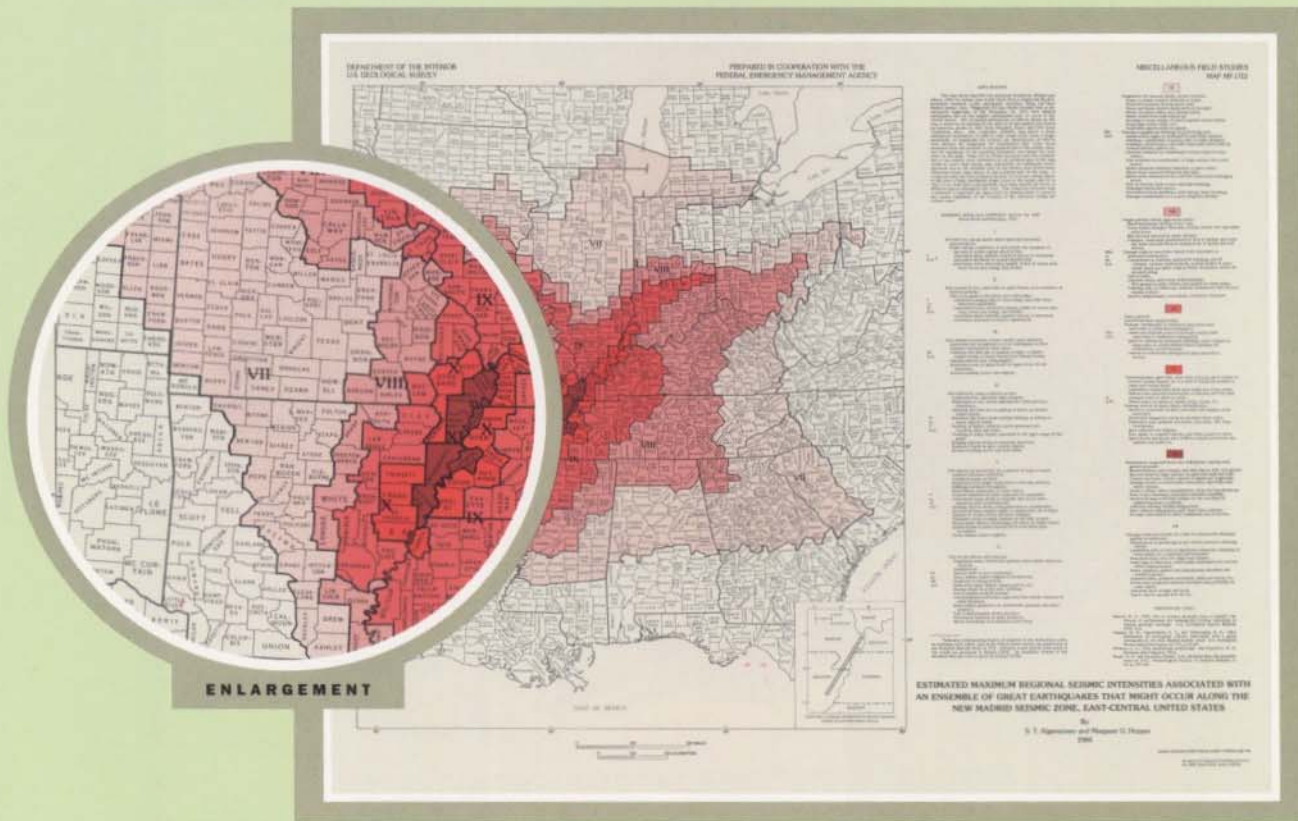
Region Covered

The States of Missouri, Illinois, Indiana, Kentucky, Tennessee, Mississippi, Arkansas

Publisher/Contact Agency

Central United States Earthquake Consortium Organization of State Geologist, c/o Department of Natural Resources, Illinois State Geological Survey, Natural Resources Building, 615 East Peabody Drive, Champaign, IL 61820-6964

ESTIMATED MAXIMUM REGIONAL SEISMIC INTENSITIES ASSOCIATED WITH AN ENSEMBLE OF GREAT EARTHQUAKES THAT MIGHT OCCUR ALONG THE NEW MADRID SEISMIC ZONE, EAST-CENTRAL UNITED STATES



Map Description

This map shows hypothetical maximum intensities by county that would result from a magnitude 8.6, maximum intensity XI, earthquake anywhere along the New Madrid seismic zone. The composite intensity map is believed to represent the upper level of shaking likely to occur in any county regardless of the location of the epicenter within the seismic zone. State and county boundaries are shown.

Limitations

This composite intensity map shows a more widespread distribution of effects than would result from a single earthquake of magnitude 8.6, because the distribution of effects were plotted for magnitude 8.6 earthquakes that could occur anywhere from the northern to the southern end of the seismic zone. Thus, for an actual epicenter near the southern end of the seismic zone, intensities in the northern part of the map would be lower than shown; and similarly for an epicenter near the northern part of the seismic zone, intensities in the southern part of the map would be lower than shown. Although each county is shown as all one intensity, the variation in intensity across a county can be substantial.

Title of Map

Estimated Maximum Regional Seismic Intensities Associated With an Ensemble of Great Earthquakes That Might Occur Along the New Madrid Seismic Zone, East-Central United States

Author(s)

S.T. Algermissen and Margaret G. Hopper

Date Published

1984

Publication Number

Miscellaneous Field Studies Map MF-1712

Map Coordinates

Latitude: 25N-49N; Longitude: 80W-95W

Map Scale

Not Available

Map Sheet Size

16.8H x 20W inches

Intended Users

Emergency Response Planners, Land Use Planners, Geologist, Engineers, Insurance Professionals

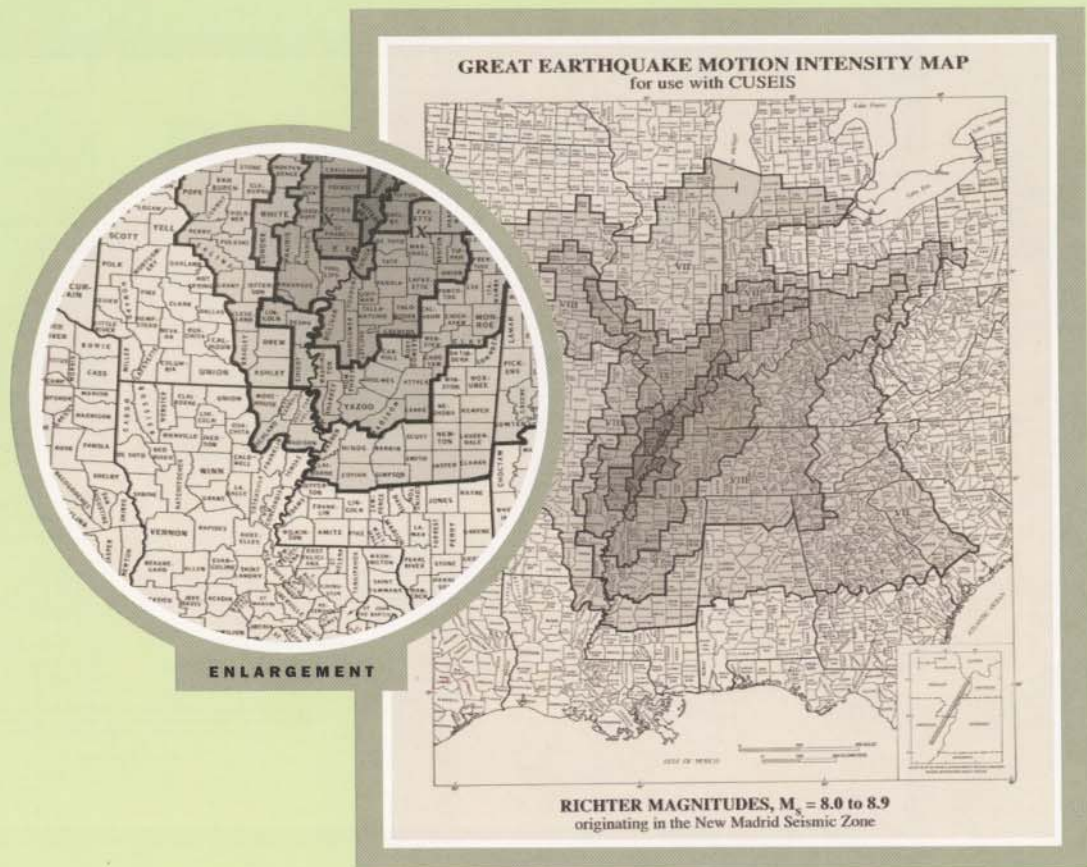
Region Covered

Louisiana, Arkansas, Missouri, Iowa, Illinois, Indiana, Ohio, West Virginia, Kentucky, Tennessee, South Carolina, Georgia, Alabama and Mississippi. Parts of Texas, Oklahoma, Kansas, Nebraska, Minnesota, Wisconsin, Michigan, Pennsylvania, New York, Virginia, North Carolina and Florida are also shown.

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225

GREAT EARTHQUAKE MOTION INTENSITY MAP FOR USE WITH CLUSEIS - RICHTER MAGNITUDES, $M_s=8.0$ to 8.9 ORIGINATING IN THE NEW MADRID SEISMIC ZONE



Map Description

This map shows hypothetical maximum intensities by county that would result from a magnitude 8.0-8.9 earthquake anywhere along the New Madrid seismic zone. The composite intensity map is believed to represent the upper level of shaking likely to occur in any county regardless of the location of the epicenter within the seismic zone. State and county boundaries are shown.

Limitations

This composite intensity map shows a more widespread distribution of effects than would result from a single earthquake of magnitude 8.0-8.9 because the distribution of effects were plotted for magnitude 8.0-8.9 earthquakes occurring anywhere from the northern to the southern end of the seismic zone. Thus, for an actual epicenter near the southern end of the seismic zone, intensities in the northern part of the map would be lower than shown and, similarly, for an epicenter near the northern part of the seismic zone, intensities in the southern part of the map would be lower than shown. Although each county is shown as all one intensity, the variation in intensity across a county can be substantial.

Title of Map

Great Earthquake Motion Intensity Map for Use With CLUSEIS—Richter Magnitudes, $M_s=8.0$ to 8.9 Originating in the New Madrid Seismic Zone

Author(s)

Not Available

Date Published

1994 (Third Printing)

Publication Number

Damages and Losses From Future New Madrid Earthquakes: A Central U.S. Earthquake Intensity Scale, "CLUSEIS," for Pre-Earthquake Planning

Map Coordinates

Latitude: 27N-44N; Longitude: 80W-95W

Map Scale

1:9,000,000 (Estimated)

Map Sheet Size

20H x 16W inches

Intended Users

Emergency Response Planners, Land Use Planners, Insurance Professionals

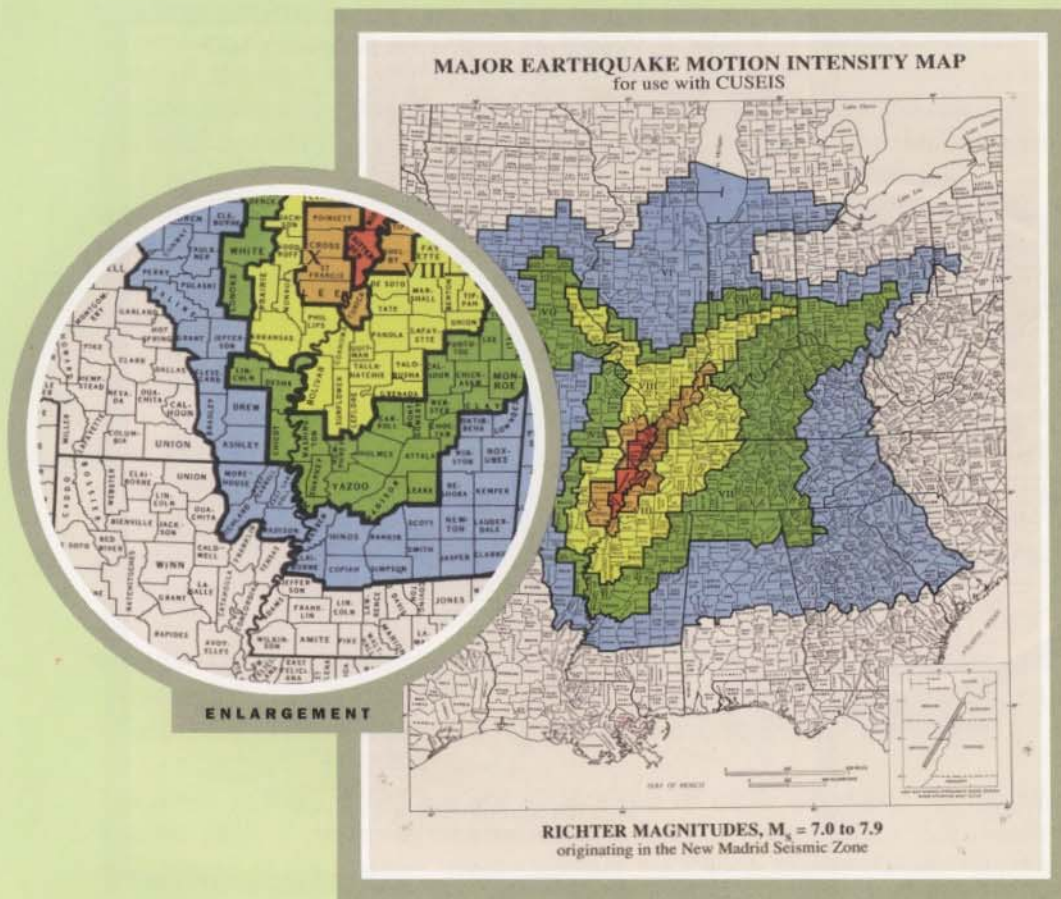
Region Covered

All of the States of Louisiana, Arkansas, Missouri, Iowa, Illinois, Indiana, Ohio, West Virginia, Kentucky, Tennessee, South Carolina, Georgia, Alabama and Mississippi. Parts of Texas, Oklahoma, Kansas, Nebraska, South Dakota, Minnesota, Wisconsin, Michigan, Pennsylvania, New York, Maryland, Virginia, North Carolina and Florida are also included.

Publisher/Contact Agency

Center for Earthquake Studies, Southeast Missouri State University, On University Plaza, Cape Girardeau, MO 63701

MAJOR EARTHQUAKE MOTION INTENSITY MAP FOR USE WITH
 CLUSEIS - RICHTER MAGNITUDES, $M_s=7.0$ to 7.9 ORIGINATING
 IN THE NEW MADRID SEISMIC ZONE



Map Description

This map shows hypothetical maximum intensities by county that would result from a magnitude 7.0-7.9 earthquake anywhere along the New Madrid seismic zone. The composite intensity map is believed to represent the upper level of shaking likely to occur in any county regardless of the location of the epicenter within the seismic zone. State and county boundaries are shown.

Limitations

This composite intensity map shows a more widespread distribution of effects than would result from a single earthquake of magnitude 7.0-7.9 because the distribution of effects were plotted for magnitude 7.0-7.9 earthquakes occurring anywhere from the northern to the southern end of the seismic zone. Thus, for an actual epicenter near the southern end of the seismic zone, intensities in the northern part of the map would be lower than shown and, similarly, for an epicenter near the northern part of the seismic zone, intensities in the southern part of the map would be lower than shown. Although each county is shown as all one intensity, the variation in intensity across a county can be substantial.

Title of Map

Major Earthquake Motion Intensity Map for Use with CUSEIS—Richter Magnitudes, $M_s=7.0$ to 7.9 Originating in the New Madrid Seismic Zone

Author(s)

Not Available

Date Published

1994 (Third Printing)

Publication Number

Damages and Losses From Future New Madrid Earthquakes: A Central U.S. Earthquake Intensity Scale, "CUSEIS," for Pre-Earthquake Planning

Map Coordinates

Latitude: 27N-44N; Longitude: 80W-95W

Map Scale

1:9,000,000 (Estimated)

Map Sheet Size

20H x 16W inches

Intended Users

Emergency Response Planners, Land Use Planners, Insurance Professionals

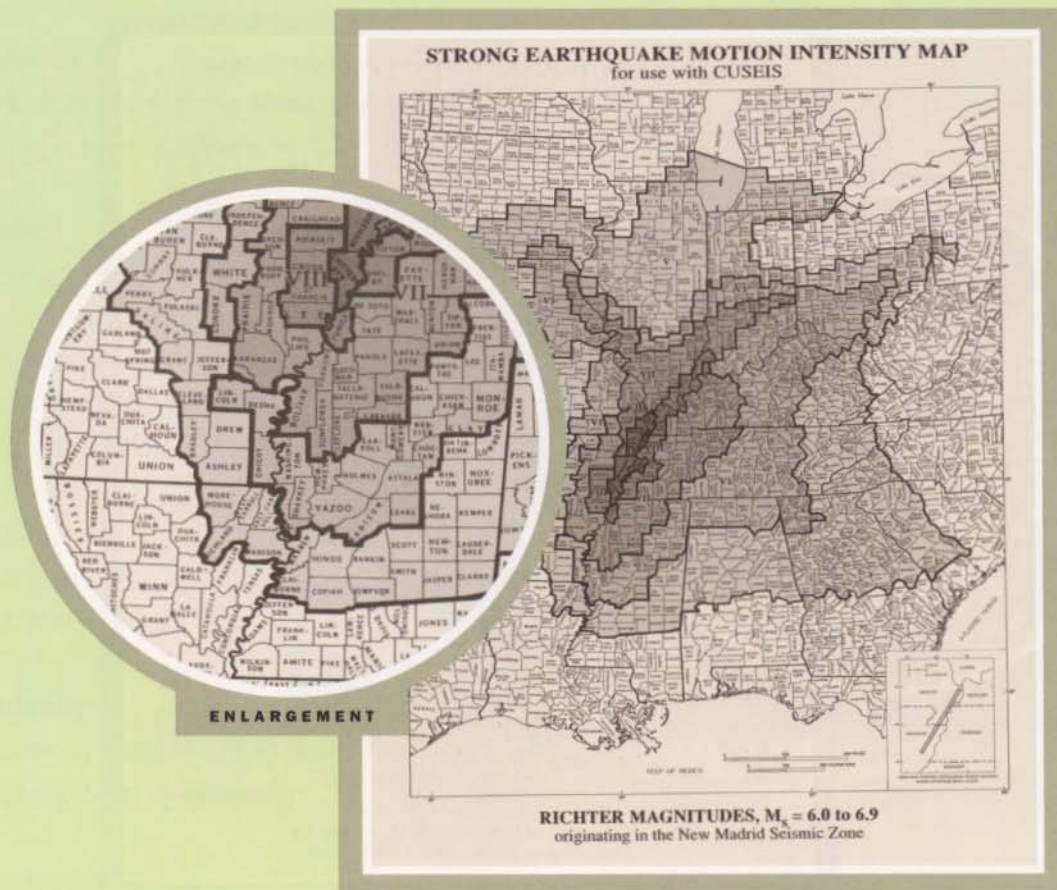
Region Covered

All of the States of Louisiana, Arkansas, Missouri, Iowa, Illinois, Indiana, Ohio, West Virginia, Kentucky, Tennessee, South Carolina, Georgia, Alabama and Mississippi. Parts of Texas, Oklahoma, Kansas, Nebraska, South Dakota, Minnesota, Wisconsin, Michigan, Pennsylvania, New York, Maryland, Virginia, North Carolina and Florida are also included.

Publisher/Contact Agency

Center for Earthquake Studies, Southeast Missouri State University, One University Plaza, Cape Girardeau, MO 63701

STRONG EARTHQUAKE MOTION INTENSITY MAP FOR USE WITH CLUSEIS - RICHTER MAGNITUDES, $M_s=6.0$ to 6.9 ORIGINATING IN THE NEW MADRID SEISMIC ZONE



Map Description

This map shows hypothetical maximum intensities by county that would result from a magnitude 6.0-6.9 earthquake anywhere along the New Madrid seismic zone. The composite intensity map is believed to represent the upper level of shaking likely to occur in any county regardless of the location of the epicenter within the seismic zone. State and county boundaries are shown.

Limitations

This composite intensity map shows a more widespread distribution of effects than would result from a single earthquake of magnitude 6.0-6.9 because the distribution of effects were plotted for magnitude 6.0-6.9 earthquakes occurring anywhere from the northern to the southern end of the seismic zone. Thus, for an actual epicenter near the southern end of the seismic zone, intensities in the northern part of the map would be lower than shown and, similarly, for an epicenter near the northern part of the seismic zone, intensities in the southern part of the map would be lower than shown. Although each county is shown as all one intensity, the variation in intensity across a county can be substantial.

Title of Map

Strong Earthquake Motion Intensity Map for Use with CUSEIS—Richter Magnitudes, $M_s=6.0$ to 6.9 Originating in the New Madrid Seismic Zone

Author(s)

Not Available

Date Published

1994 (Third Printing)

Publication Number

Damages and Losses From Future New Madrid Earthquakes: A Central U.S. Earthquake Intensity Scale, "CUSEIS," for Pre-Earthquake Planning

Map Coordinates

Latitude: 27N-44N; Longitude: 80W-95W

Map Scale

1:9,000,000 (Estimated)

Map Sheet Size

20H x 16W inches

Intended Users

Emergency Response Planners, Land Use Planners, Insurance Professionals

Region Covered

All of the States of Louisiana, Arkansas, Missouri, Iowa, Illinois, Indiana, Ohio, West Virginia, Kentucky, Tennessee, South Carolina, Georgia, Alabama and Mississippi. Parts of Texas, Oklahoma, Kansas, Nebraska, South Dakota, Minnesota, Wisconsin, Michigan, Pennsylvania, New York, Maryland, Virginia, North Carolina and Florida are also included.

Publisher/Contact Agency

Center for Earthquake Studies, Southeast Missouri State University, One University Plaza, Cape Girardeau, MO 63701

GROUND-SHAKING HAZARDS FROM EARTHQUAKES IN THE CONTIGUOUS UNITED STATES



Map Description

This map shows earthquake ground accelerations having 10 percent probability of being exceeded in 50 years for a firm rock site condition. This map is based on seismicity and fault-slip rates and takes into account the frequency of occurrence of earthquakes of various magnitude.

Limitations

Locally, hazard may be greater than that shown because site geology may amplify ground motions.

Title of Map

Ground-Shaking Hazards from Earthquakes in the Contiguous United States

Author(s)

Not Available

Date Published

Not Available

Publication Number

Not Available

Map Coordinates

Not Available

Map Scale

Not Available

Map Sheet Size

4 x 6 inches (postcard)

Intended Users

Emergency Response Planners, Land Use Planners, Insurance Professionals



Region Covered

48 Contiguous States

Publisher/Contact Agency

U.S. Geological Survey Map Distribution, Box 25286, Federal Center, CO 80225