

To duplicate the functionality of the original CDROM for Map 69, you must copy or extract all of the files and folders in this zip archive to a new folder on your PC. If you are using a zip-archive program (7-Zip and WinZip are two of many), make sure that it is set to preserve the original folder structure (path).

To activate the CDROM content, navigate to the folder where the files were extracted and then double click on file *eqpa_intro.htm*.

The information below is edited from the *readme.txt* file on the original CDROM. Instructions for purchasing the CDROM have been removed because it is anticipated that sales of the CDROM will cease shortly after this zip archive is made available for download from the bureau website.

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Map 69

Earthquake Catalog and Epicenter Map of Pennsylvania

compiled by
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I. SUMMARY

The enclosed files present a compilation of earthquake epicenters in and near Pennsylvania. The data include instrumentally recorded seismic events from the mid-1960s to July 31, 2003, as well as historical (pre-instrumental) events since 1724.

The information is presented in several files:

Database/Catalog

- a Microsoft Access (versions 97 and 2000) database, containing an earthquake events table and a references table
- DBF files of the earthquake and references data exported from the Access database,
- a PDF metadata file describing the structure and fields of the Access database,
- a PDF file of the earthquake events table from the Access database in

- tabular form, and
- a PDF file of the references.

Epicenter Map/Dataset

- a PDF file of the earthquake epicenter map (1:750,000 scale),
- a GeoTIFF (georeferenced image) of the epicenter map,
- an ArcGIS shapefile for earthquake epicenters,
- an ArcInfo coverage (export file) for earthquake epicenters, and
- a metadata file describing the contents of the coverage.

The data have been obtained from existing catalogs and published sources and compiled in an Access database. Each database record encompasses just one event (main shocks, foreshocks, and aftershocks are recorded separately). Each record contains a unique event number, a map number, date, time (hour, minute, and second), location (latitude and longitude, as well as county and town), magnitude, intensity, and depth of focus. In addition, each record presents the source(s) of the event data, and ancillary remarks.

II. OBJECTIVES

The objectives of this study are to (1) provide a comprehensive database/catalog and coverage (dataset) of earthquake epicenters in and near Pennsylvania from 1724 to July 31, 2003, which had previously been lacking in one source; and (2) create digital files in standard formats that can be readily used by government, industry, academia, and the public to obtain geologic information critical to planning and decision making.

III. SOFTWARE REQUIRED FOR VIEWING THE FILES

MICROSOFT ACCESS

Users will need Microsoft Access software (version 2000 or version 97) to open the native file. The earthquake events and references tables are also provided in dBASE IV (DBF) format so that they may be opened in any program that handles DBF files.

ADOBE ACROBAT READER

To view and print the catalog, map, and metadata, users will need software that is capable of opening files in PDF (Portable Document Format). Users who do not presently have such software may obtain Adobe Acrobat Reader, which is available for downloading free of charge from Adobe, Inc., at www.adobe.com/products/acrobat/readstep2.html. Please refer to the help files and other documentation on the Adobe, Inc., web site for instructions on installing and using this software.

SOFTWARE FOR VIEWING DATASET

The vector digital dataset that is in SHP (ESRI shapefile) or E00 (ESRI ArcInfo export) format and the georeferenced map image (GeoTIFF) may be accessed and viewed using any software capable of importing and utilizing files in these formats. Examples of software that is available for downloading free of charge are as follows:

(1) dlgv32 Pro by Global Mapper Software LLC at <http://mcmcweb.er.usgs.gov/drc/dlgv32pro/>. This software requires a personal computer (PC) running Microsoft Windows 98/NT/2000/ME/XP/Vista operating system; please refer to the on-line user's manual for instructions.

(2) ArcExplorer by ESRI at www.esri.com/software/arcexplorer/index1.html. Please refer to the system requirements and other helpful links, which are available at the same site.

OTHER SOFTWARE

A browser or other software capable of reading HTML format is needed for other files on this CD-ROM. Examples of browsers that are available for downloading free of charge are Microsoft Explorer (www.microsoft.com/windows/products/winfamily/ie/default.msp) and Netscape Navigator (<http://channels.netscape.com/ns/browsers/default.jsp>).

IV. CONTENTS

A general summary of the content of this CD-ROM is as follows (for each path, assume that the drive letter for the CD-R drive on your computer precedes the path name--for this discussion, the CD-R drive letter is assumed to be "E"):

1. Introductory

E:\readme.txt--this document.

E:\eqpa_intro.htm--file containing a description of the contents of this CD-ROM; includes links to PDF files of the map, catalog, and metadata, and to the directories containing the database and coverage.

E:\eqpa_disclaimer.htm--file containing important information about liability, and access and use constraints pertaining to the database, map, coverage, and other information provided on this CD-ROM. This information in "eqpa_disclaimer.htm" is reproduced in Part VI below.

E:\introduction--directory containing files in HTML format that pertain to the summary and description of the contents of the CD-ROM.

2. Database/Catalog

E:\database\Access\eqpa.mdb--Microsoft Access (version 2000) database of

earthquake epicenters and references.

E:\database\Access\eqpa97.mdb--Microsoft Access (version 97) database of earthquake epicenters and references.

E:\database\DBF\eqpa.dbf--earthquake event data exported from Access database in dBASE IV (DBF) format.

E:\database\DBF\eqparefs.dbf--references data exported from the Access database in dBASE IV format.

E:\database\events_PDF\eqpa.pdf--PDF of the data in the earthquake events table of the Access database.

E:\database\metadata\eqpadbmeta.pdf--PDF of the metadata file for the eqpa.mdb database.

E:\database\references\eqparefs.pdf--PDF of the references prepared from the data in the references table of the Access database.

3. Epicenter Map/Dataset

E:\epimap\map_PDF\eqpamap.pdf--PDF of the earthquake epicenter map at 1:750,000 scale.

E:\epimap\geotiff\eqpa.tif--georeferenced image of the map, cropped to include only the map area and explanation.

E:\epimap\shapefile\eqpashp.shp--ArcGIS shapefile of the dataset for earthquake epicenters.

E:\epimap\exportfile\eqpa.e00--ArcInfo export file of the dataset for earthquake epicenters.

E:\epimap\metadata\eqpameta.htm--metadata file for the ArcInfo coverage.

V. DOWNLOADING THE FILES

It is recommended that the files be downloaded from the CD-ROM to the hard drive of your computer for more efficient processing. To download, (1) make a directory on the hard drive (for example, "eqpa"); (2) select all files and directories on the CD-ROM and move them to the directory on the hard drive, keeping the directory structure of the CD intact within the new directory; and (3) select all of the downloaded files and remove the "read only" attribute (this is generally done through the "Properties" dialog box). Please note that

the autoplay feature will not function after the files have been moved to the hard drive, but the links in "eqpa_intro.htm" will be usable.

VI. DISTRIBUTION LIABILITY AND ACCESS CONSTRAINTS

NO WARRANTY

These data files and documentation are provided "as is," and the user assumes the entire risk as to their quality and performance.

The Commonwealth of Pennsylvania makes no guarantee or warranty concerning the accuracy of information contained in the geographic data or accompanying documentation. The Commonwealth of Pennsylvania further makes no warranties, either expressed or implied, as to any other matter whatsoever, including, without limitation, the completeness or condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user.

Although these data have been processed successfully on a computer system at the Department of Conservation and Natural Resources, the Commonwealth of Pennsylvania makes no warranty, expressed or implied, regarding the use of the data files or accompanying documentation on any other computer system, nor does the act of distribution constitute any such warranty.

Reference therein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the Commonwealth of Pennsylvania government or any agency thereof.

LIMITATION OF LIABILITY

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The Commonwealth of Pennsylvania assumes no legal liability for the accuracy, completeness, or usefulness of the data files and accompanying documentation. In no event shall the Commonwealth of Pennsylvania have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of use of or reliance on the geographic data.

USE AND ACCESS CONSTRAINTS

Not for commercial resale.

The digital files on this CD-ROM are public information and, as such, they may be used as a reference source and may be interpreted by organizations, agencies,

units of government, or others based on needs; however, each user is responsible for the appropriate application of the data. Federal, state, or local regulatory bodies are not to reassign to the Bureau of Topographic and Geologic Survey any authority for the decisions they make using these datasets.

The dataset is not meant for site-specific analysis or for use at scales finer (i.e., larger, more detailed) than 1:250,000. Users are not to misrepresent the dataset by presenting it at scales for which it is not intended, nor to imply that presentation at such scales is approved by the Bureau of Topographic and Geologic Survey.

Please refer to the metadata for additional information concerning the accuracy and limitations of the database, dataset, and map, which affects their appropriate use.

CREDITS

The data for the earthquake epicenters contained on this disc may be used provided that credit for the original (unaltered) dataset is given to the compiler, Rodger T. Faill, and the publisher, Pennsylvania Bureau of Topographic and Geologic Survey, Department of Conservation and Natural Resources. Users shall clearly indicate the source of the data. Users who modify the data in any way are obligated to describe the types of modifications they have made, including modifications to hard-copy maps. Users are not to misrepresent Pennsylvania Bureau of Topographic and Geologic Survey (Pennsylvania Geological Survey, or PaGS) datasets, nor to imply that changes they (users) have made were approved by the PaGS.

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