

U.S. DEPARTMENT OF THE INTERIOR
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Map database for surficial materials in the conterminous United States

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Scale 1:5,000,000

USGS Data Series 425

Online linkage: <http://pubs.usgs.gov/ds/425/>

INTRODUCTION

The Earth's bedrock is overlain in many places by a loosely compacted and mostly unconsolidated blanket of sediments, or by weathered, residual soil material. For the conterminous United States, these materials were shown on a map by Soller and Reheis (U.S. Geological Survey Open-file report 03-275, 2004, scale 1:5,000,000; <http://pubs.usgs.gov/of/2003/of03-275/>). That map was published as a PDF file, from an Adobe Illustrator-formatted version of the provisional unpublished GIS database. The provisional GIS files were further edited and processed without modifying the content of the published map (except for the differentiation of “Volcanic rocks” into “basaltic and andesitic” and “rhyolitic”), and are here published.

Digital datasets and corresponding metadata files are stored in both ESRI file geodatabase and shapefile formats. Geologic unit polygons and lines are stored in feature classes in the geodatabase. Geologic unit polygon data were attributed for name, description, and geologic age. Users interested in the methods used for compiling this map should carefully refer to the Purpose and Processing Steps in the metadata, and to the Caveats section of Soller and Reheis (2004).

GETTING STARTED

The surficial materials geodatabase and associated files are bundled in a single downloadable zip file called USGS_DS_425.zip.

To install:

- Download USGS_DS_425.zip (~80 MB space required) to local hard drive
- Open with Winzip or other zip utility and click the “Extract” button (highlighting of the individual files is not necessary)
- Extract contents to a destination on the local hard drive
- A folder will be created called USGS_DS_425
- Inside the folder, click Surficial_Mtls_US.mxd to launch the map document

FOLDER CONTENTS

When USGS_DS_425.zip is extracted, a folder by the same name is created. The contents of the folder are:

- Surficial_Mtls_US.mxd – ArcGIS map document that launches the program.
- Surficial_materials.gdb – ArcGIS file geodatabase containing comprehensive spatial data.
- “Layer_files” folder containing ArcGIS symbology files for selected feature classes in the file geodatabase.
- DS_425_MapUnitAndLineDescriptions.xls, .xlsx, and .ods – spreadsheet files in different formats containing full descriptions of each map unit and parent map unit.

When USGS_DS_425_SHAPES.zip is extracted, a folder by the same name is created. The contents of the folder are:

- Contacts shapefile
- State line shapefile
- Surficial materials shapefile
- DS_425_MapUnitAndLineDescriptions.xls, .xlsx, and .ods

METADATA

Each feature class has associated metadata files that are viewable and exportable through ArcCatalog. To view a metadata file, simply click on the feature class in ArcCatalog and then click the Metadata tab.

SYSTEM REQUIREMENTS

- ArcGIS Desktop 9.X
- Windows XP /Windows 2000
- CPU Speed: 1.0 GHz recommended or higher
- Processor: Intel Pentium or Intel Xeon Processors
- Memory/RAM: 512 MB minimum, 1 GB recommended or higher
- Display Color: Greater than 256 color depth
- Data Disk Space Requirements: 80 MB File Geodatabase and associated files (Unzipped)

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