DIGITAL MAPPING TECHNIQUES 2024

The following was presented at DMT ‘24
May 13 - 16, 2024

The contents of this document are provisional

See Presentations and Proceedings from the DMT Meetings (1997-2024)

http://ngmdb.usgs.gov/info/dmt/
How to cite the cartographic product and the GIS database for a geologic map?

Cite the original publication for use of either product.

How to title a GIS database if the map upon which it's based was previously published?

“GIS Data for the [Map Title]”

Data, decorum, and DOIs

Ian Orland
Wisconsin Geological and Natural History Survey
DMT 2024
Credit to GIS and cartography staff

Library science, cataloging

Authorship responsibilities

DOI, digital infrastructure

Bonnie Steward, Digital Production Assistant
D. Sibley, Web Developer
Pete Schoephoester, Asst. Director
Liz Ceperley, Editor
WGNHS staff
WGNHS Publication Catalog

CKAN data management system

wgnhs.wisc.edu/catalog
Bedrock Geology of Jefferson County, Wisconsin

Located in southeast Wisconsin, Jefferson County is almost entirely blanketed by sediments that were delivered or shaped by the ice sheet that covered this area during the last ice age. New mapping interprets the distribution of the bedrock surface that is buried beneath those glacial sediments as interpreted by three drill cores, over 13,000 well...

Bedrock Geology of Jefferson County, Wisconsin
Stewart, E.K.;
2024
Map: 3875 x 325 in, scale 1:100,000

GIS Data for the Bedrock Geology of Jefferson County, Wisconsin [dataset]
Stewart, E.K.;
2024
GIS Data: GeoM5 file geodatabase, geopackage, shapefiles, metadata

Bedrock Elevation Raster for the Bedrock Geology of Jefferson County, Wisconsin [dataset]
Stewart, E.K.;
2024
GIS Data: File geodatabase, metadata

Geochemical Data for the Bedrock Geology of Jefferson County, Wisconsin [dataset]
Stewart, E.K.;
2024
Data: Excel spreadsheet

Supplemental Report on the Bedrock Geology of Jefferson County, Wisconsin [supplement]
Stewart, E.K.;
2024
Report 5 p.
Bedrock Geology of Jefferson County, Wisconsin

Located in southeast Wisconsin, Jefferson County is almost entirely blanketed by sediments that were delivered or shaped by the ice sheet that covered this area during the last ice age. New mapping interprets the distribution of the bedrock surface that is buried beneath those glacial sediments as interpreted by three drill cores, over 13,000 well...

GIS Data for the Bedrock Geology of Jefferson County, Wisconsin [dataset 1]
Stewart, E.K.;
2024
Data: GeMS file geodatabase, geopackage, shapefiles, metadata

Bedrock Elevation Raster for the Bedrock Geology of Jefferson County, Wisconsin [dataset 2]
Stewart, E.K.;
2024
Data: GeMS file geodatabase, metadata

Geochemical Data for the Bedrock Geology of Jefferson County, Wisconsin [dataset 3]
Stewart, E.K.;
2024
Data: Excel spreadsheet

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Stewart, E.K.; 2024
Map: 38.7541 x 32.5 in; scale 1:100,000

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Main resource
Suggested citation
DOI
Resources
“Supplemental materials”
Verbose, structured titles
[in-text reference]
Metadata:
release date
data format
GIS Data for the Bedrock Geology of Jefferson County, Wisconsin [dataset 1]

From the dataset abstract

Located in southeast Wisconsin, Jefferson County is almost entirely blanketed by sediments that were delivered or shaped by the ice sheet that covered this area during the last ice age. New mapping interprets the distribution of the bedrock surface that is buried beneath those glacial sediments as interpreted by three drill cores, over 13,000 well construction reports, examination of well cuttings, and 34 geochemical profiles of boreholes. This mapping will support parallel efforts to characterize how the bedrock affects groundwater quality. Includes map, 5-page report, geochemical data, raster of bedrock elevation surface, and GIS data in the geologic map schema (GeMS) format.

Source: Bedrock Geology of Jefferson County, Wisconsin

Additional Information

<table>
<thead>
<tr>
<th>Author</th>
<th>Stewart, E.K.</th>
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Stewart, E.K.; 2024
DOI: Digital Object Identifier

“Persistent identifier”
Permanent URL

https://doi.org/10.5555/YRFU1371

DOI resolver
prefix
suffix
DOI: Digital Object Identifier

“Persistent identifier”
Permanent URL
Minting agencies charge a small fee, archive metadata

https://doi.org/10.5555/YRFU1371
DOI resolver
prefix
suffix

CrossRef academic journal standard
DataCite dataset standard
"We intend to ... expand our list of supported contributor roles in a future update."
Joint Statement on Research Data

CrossRef, DataCite, STM

Nov. 28th, 2023; https://doi.org/10.5438/cstd-5t12

“...

recognising the need for an amplified focus on data citation

...

twelve best practices in research data sharing

...

8. Repositories and publishers connect articles and datasets through persistent identifier connections in the metadata and reference lists...”