

DMT'23 AGENDA

"From field to publication and beyond – Comparing and improving our workflows"

NOTE: Unless otherwise specified, all activities are in Rasmuson Hall, Room 101.

Sunday, May 21

1:00 – 4:00 pm GeMS workshop (optional; University of Alaska, Rasmuson Hall, Room 101)

5:00 – 7:00 pm Meet and Greet at the Geologic Materials Center (3651 Penland Parkway). Hors d'oeuvres and facility tour.

Monday, May 22

7:00 – 8:30 am Registration, coffee and pastries, and poster setup

8:30 – 8:45 am Welcoming remarks – By Ken Papp (AKDGGGS) and Dave Soller (USGS)

8:45 – 9:10 am The National Geologic Map Database -- Progress and plans
By Dave Soller (U.S. Geological Survey)

Topics 1 and 2: Fieldwork -- capturing data and observations, AND Creating the map and GIS data

9:10 – 9:30 am Geological Data Flow, from field to publication
By Étienne Girard (Geological Survey of Canada, Natural Resources Canada)

9:30 – 9:50 am GIS data management and modernization
By John Sanford and Yiwen Li (Montana Bureau of Mines and Geology)

9:50 – 10:00 am Scripting and GeMS: Extending the functionality of the GeMS toolbox
By Andrew L. Wunderlich (Tennessee Geological Survey)

10:00 – 10:30 am Coffee break. From 10:00 – 10:05 am, all presenters meet with Dave Soller.

10:30 – 10:50 am Geological mapping combining traditional with digital techniques
By Don Tripp, Robin Rupp, Valerie Beckham-Feller, and Ben Romlein (Indiana Geological and Water Survey)

10:50 – 11:10 am Using custom scripts in ArcPro to create editing layout for cross sections at 1km spacing
By Sarah Francis (Minnesota Geological Survey)

11:10 – 11:30 am Mapping in the intermountain west focusing specifically on surficial deposits, using new attribute rules
By Katherine Alexander, Margaret Berry, Sam Johnstone, Cal Ruleman, Adam Hudson, Michael Frothingam, and Zach Engle (U.S. Geological Survey)

11:30 – 11:50 am MapMerger, a geologic map compilation tool for ArcPro
By Ryan Crow (U.S. Geological Survey)

11:50 – 12:00 pm Can the GeMS schema and toolbox be used in an enterprise geodatabase?
By Christian Halsted (Maine Geological Survey)

12:00 – 1:00 pm *Lunch*

1:00 – 1:20 pm Montana GeMS workflows

By Patricia Gallagher Ekberg, Yiwen Li, and John Sanford (Montana Bureau of Mines and Geology)

1:20 – 1:40 pm First steps towards compilation of a new surficial geologic map of Alaska

By Frederic H. Wilson (U.S. Geological Survey)

1:40 – 2:00 pm Using deep learning pixel classification to create preliminary surficial geologic maps

By Mary DiGiacomo-Cohen, William Odom, and Daniel Doctor (U.S. Geological Survey)

2:00 – 2:20 pm The compilation of the geologic map of the Greater Antilles. A first digital spatial and textural database

By Frederic H. Wilson and Keith A. Labay (U.S. Geological Survey)

2:20 – 2:40 pm Contracting out geologic map digitization and attribution using the GeMS standard, ver 2.0

By Wes Buchanan and Chris Wyatt (Alaska Division of Geological & Geophysical Surveys)

2:40 – 3:00 pm From paper to AI: Optimizing geologic mapping workflows

By Robert Clark, Jerry Krieger, and Darby DeBruhl (South Carolina Geological Survey)

3:00 – 3:20 pm Boundary challenges in ensuring gapless data

By Emily Bunse (Kansas Geological Survey)

3:20 – 3:50 pm *Coffee break*

3:20 – 5:00 pm Poster Session and Map Blast

During this time slot, the formally presented posters will be supplemented by a “Map Blast”. Everyone is encouraged to bring maps (finished or in preparation), and to display them. Explore what others are working on, ask questions, and share your expertise!

Tuesday, May 23

7:00 – 8:30 am *Coffee and pastries*

Topic 3: Creating and(or) managing ancillary data that's needed for making geologic maps

8:30 – 8:50 am Integrating elevation-derived hydrography with mapping at the Pennsylvania Geological Survey

By Ellen Fehrs (Pennsylvania Bureau of Geological Survey)

8:50 – 9:10 am Geologic mapping in central Texas: Overview of methods, workflows, and challenges

By Brian B. Hunt, Jeffrey G. Paine, and John Andrews (University of Texas at Austin, Bureau of Economic Geology)

9:10 - 9:50 am Discussion Session -- GeMS extension tables

A report of progress since the DMT'22-Lite meeting, on development of extension tables for geochemistry, geophysics, engineering properties, and land classifications based on geology.

Moderated by Dave Soller and Evan Thoms (U.S. Geological Survey)

9:50 - 10:10 am Geologic map prioritization through the development of a quadrangle ranking system

By Lauren Williams, Matt Heller, Marcie Occhi, and Patrick Finnerty (Virginia Department of Energy, Geology and Mineral Resources Program)

10:10 – 10:40 am Coffee break.

10:40 – 11:20 am Discussion Session -- Evaluating the STATEMAP Program: Challenges and successes
Moderated by Jenna Shelton (U.S. Geological Survey) and Rick Green (Florida Geological Survey)

Topic 4: Preparing the map for publication

11:20 – 11:40 am The WSGS peer review process—geologic, cartographic, and digital
By James Amato (Wyoming State Geological Survey)

11:40 – 12:00 pm Geologic mapping in Tennessee and the development of TNGeMS
By Andrew L. Wunderlich (Tennessee Geological Survey)

12:00 – 1:00 pm Lunch

Topic 5: Publication

1:00 – 1:20 pm The surficial geology map database of Ohio: Digital-only delivery of evolving datasets
By J.D. Stucker, Douglas A. Aden, and T. Andrew Nash (Ohio Geological Survey)

1:20 – 1:40 pm The publications and distribution process at Alaska DGGS
By Mike Hendricks, Jen Athey, Simone Montayne, Susan Seitz, and Kristen Janssen (Alaska Division of Geological & Geophysical Surveys)

1:40 – 2:00 pm Managing the Geologic Map Publication Workflow with an Enterprise Geodatabase
By Christian Halsted (Maine Geological Survey)

2:00 – 3:00 pm Discussion Session -- Challenges and approaches for releasing geologic maps, reports, and GIS datasets (resuming the discussion begun at DMT'23-Lite)
Moderated by Jessica Czajkowski (Washington Geological Survey), Mark Yacucci (Illinois State Geological Survey), Rosemary Fasselin (Utah Geological Survey) and Dave Soller (U.S. Geological Survey)

3:00 – 3:30 pm Coffee break

Topic 6 – Post-publication

3:30 – 3:40 pm Lessons learned from developing a multimap geologic database
By Pedro Rivera and Mike Hendricks (Alaska Division of Geological & Geophysical Surveys)

3:40 – 4:00 pm 3D geologic modeling tool for watershed planning
By Jacqueline Hamilton, Julia Steenberg, Andrew Retzler and Sarah Francis (Minnesota Geological Survey)

4:00 – 4:10 pm Developing, maintaining, and publishing documentation standards
By Mike Hendricks and Amy Macpherson (Alaska Division of Geological & Geophysical Surveys)

4:10 – 4:30 pm How to best serve the needs of the public? Take our survey—motivation, methodology, and results
By James Amato (Wyoming State Geological Survey)

4:30 – 4:50 pm Building a State Geological Surveys capabilities dashboard with Tableau
By Sheelagh McCarthy (Washington Geological Survey)

5:00ish – 7:00ish pm Pub night out at King Street Brewing, <http://www.kingstreetbrewing.com/>

Wednesday, May 24

7:00 – 8:30 am Coffee and pastries

8:30 – 8:50 am The National Geologic Synthesis and GeMS
By Warren Roe (U.S. Geological Survey)

8:50 – 9:00 am Bringing GeMS to the public: An interactive map of West Virginia
By Derek Spurgeon, John Bocan, and Sarah Gooding (West Virginia Geological Survey)

9:00 – 9:30 am Migrating legacy geologic maps into GeMS using GeoMapMaker
By Jordan Hastings, Carlos Gutierrez, and Andrew Zaffos (University of California - Santa Barbara, California Geological Survey, and Arizona Geological Survey)

9:30 – 10:00 am The state of the GeMS QC
By David Ahumada (U.S. Geological Survey)

10:00 – 10:30 am Coffee break

10:30 – 11:30 am Informal session, for questions and comments about this week's presentations or topics in general. Also, short, informal presentations are welcome.

11:30 – 12:00 pm Miscellaneous issues and concerns, plans for future DMT meetings, and adjourn meeting.

POSTERS:

(listed by agency name)

Mapping the bedrock topography of south-central Indiana - merging existing spatial data sets and newly acquired field data to model the bedrock surface
By Robin Rupp, Don Tripp, Ben Romlein, Dana Bissey, and Valerie Beckham-Feller (Indiana Geological and Water Survey)

Bedrock Geology of St. Louis County, Minnesota
By Mark A Jirsa, Amy Radakovich Block, Terrence J. Boerboom, and V.W. Chandler (Minnesota Geological Survey), and Dean M. Peterson (Natural Resources Research Institute)

Focus areas for subsidence from the Butte Stope Books
By Anthony Roth (Montana Bureau of Mines and Geology)

Geologic map of the Cañon Largo watershed on the Jicarilla Apache Nation, Rio Arriba and Sandoval Counties, New Mexico
By Kevin M. Hobbs and Kristin S. Pearthree (New Mexico Bureau of Geology and Mineral Resources)

Erosion and sedimentation hazard map of the Cañon Largo watershed on the Jicarilla Apache Nation, Rio Arriba and Sandoval Counties, New Mexico
By Phil L. Miller (New Mexico Bureau of Geology and Mineral Resources), Faustin N. Kumah (New Mexico Tech, Mineral Engineering Department), and Kevin M. Hobbs, Kristin S. Pearthree, and Andrew P. Jochems (New Mexico Bureau of Geology and Mineral Resources)

Progress on the Parker 30' x 60' quadrangle using the Python-based MapMerger tool

By Morgan W.M. Nasholds, Ryan S. Crow, Keith A. Howard, Dylan W. Kinser, Skyler P. Mavor, Scott E.K. Bennett, and Kyle House (U.S. Geological Survey)

Mapping depth-to-bedrock over the fractured Silurian carbonate bedrock of eastern Wisconsin

By Lisa Haas, Matthew Rehwald, and David Hart (Wisconsin Geological and Natural History Survey), Burke Minsley (U.S. Geological Survey), and Cody Calkins (Wisconsin Dept. of Agriculture, Trade and Consumer Protection)