

DIGITAL MAPPING TECHNIQUES 2022

The following was presented at DMT'22
May 22 - 25, 2022

The contents of this document are provisional

See Presentations and Proceedings
from the DMT Meetings (1997-2022)

<http://ngmdb.usgs.gov/info/dmt/>



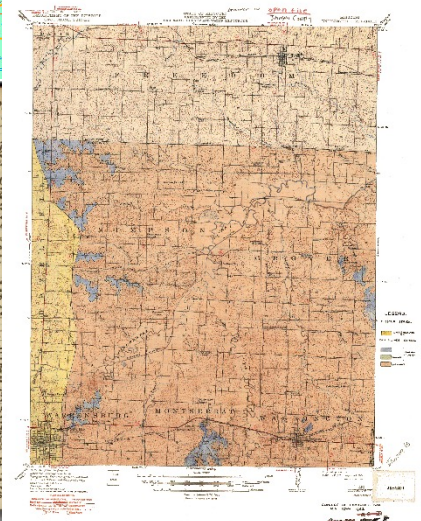
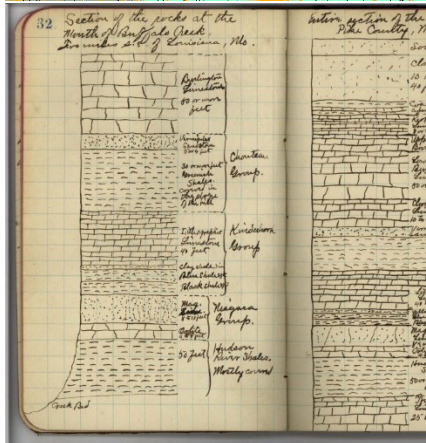
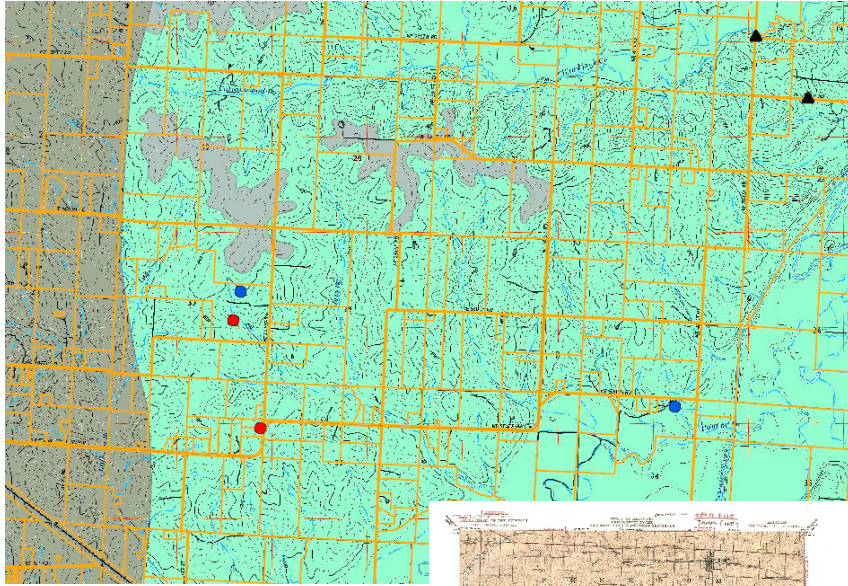
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STATEMAP Year in Review

Kyle Ganz

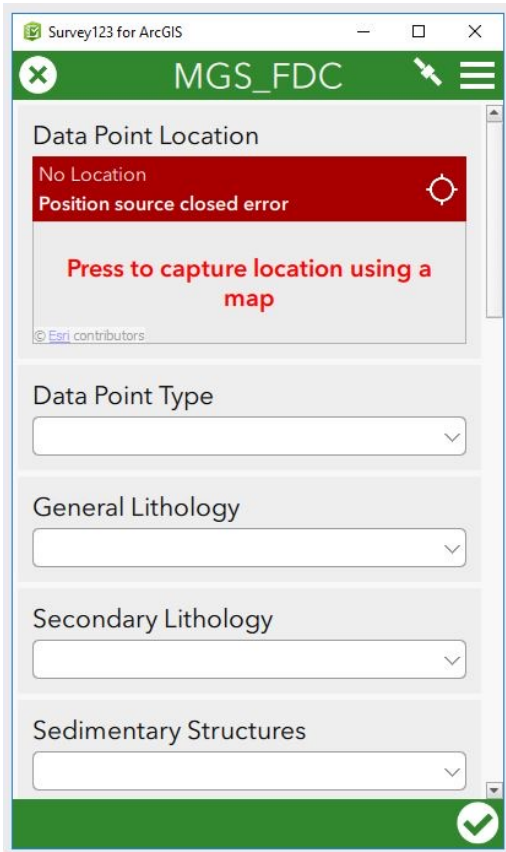
Missouri Geological Survey

Start of the year (Fall)



- Historical Mapping
- Current high resolution bedrock polygons
- Well Logs, E Logs
- Coal Logs
- IMOP
- Measured Sections
- Parcel data and public access lands
- Notebooks
- Previous relevant publications

Field Season (Late Fall – Spring)



The screenshot shows a mobile application window titled "Survey123 for ArcGIS" with a sub-header "MGS_FDC". The main content area is divided into several sections:

- Data Point Location:** A red error banner reads "No Location" and "Position source closed error". Below it, a red button says "Press to capture location using a map".
- Data Point Type:** A dropdown menu.
- General Lithology:** A dropdown menu.
- Secondary Lithology:** A dropdown menu.
- Sedimentary Structures:** A dropdown menu.

A green checkmark icon is visible in the bottom right corner of the app interface.

- Collector app available on iPads
- Flexibility of field work and data collection encouraged (digital-paper map-notebook-gps)



Mid Season Review (Winter)

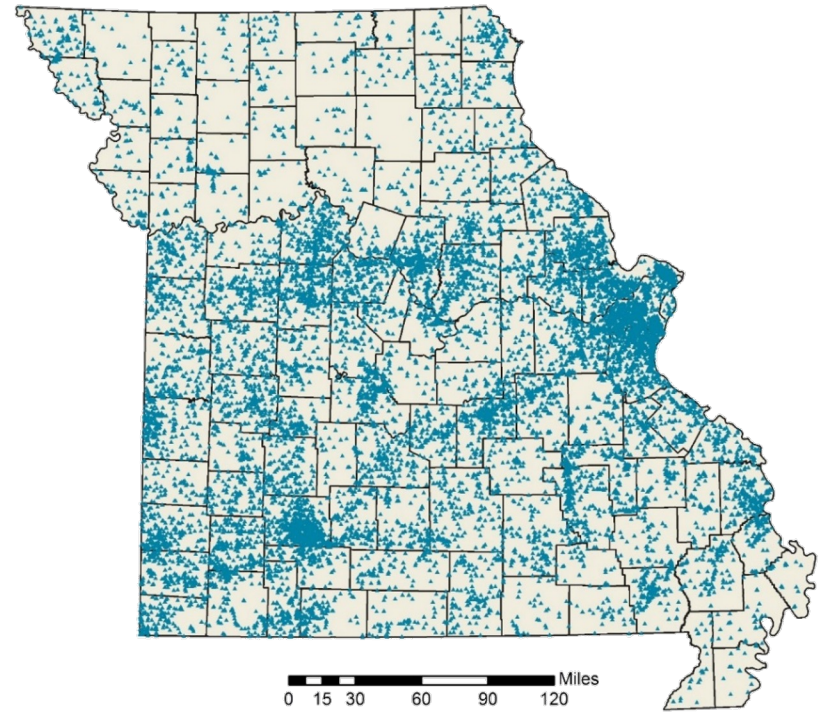
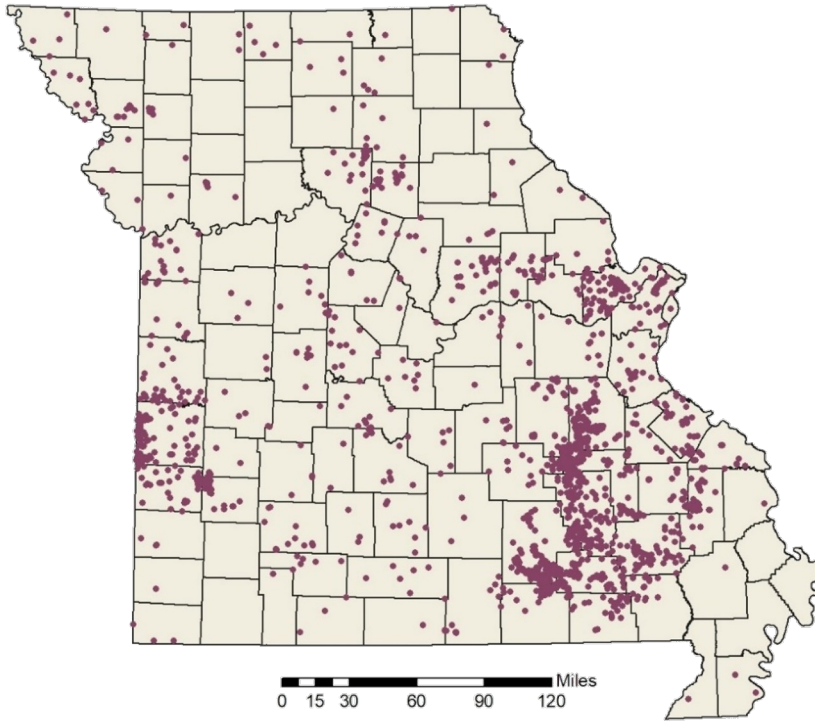


- Review problem areas with mapping team
- Check progress of mapping so far



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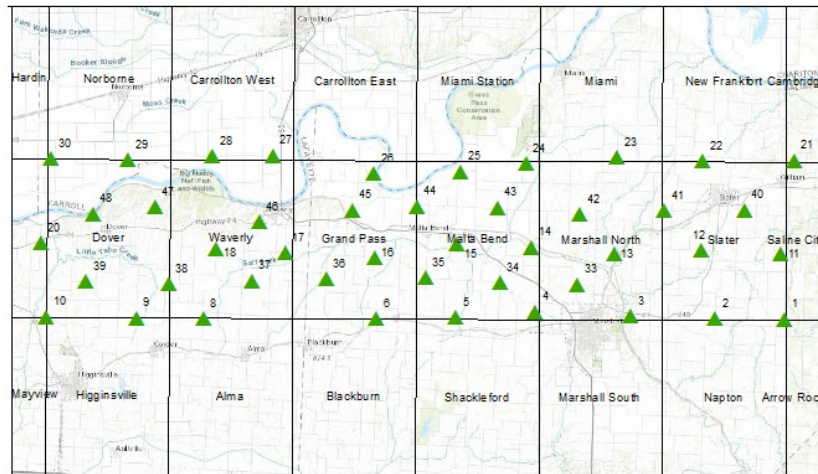
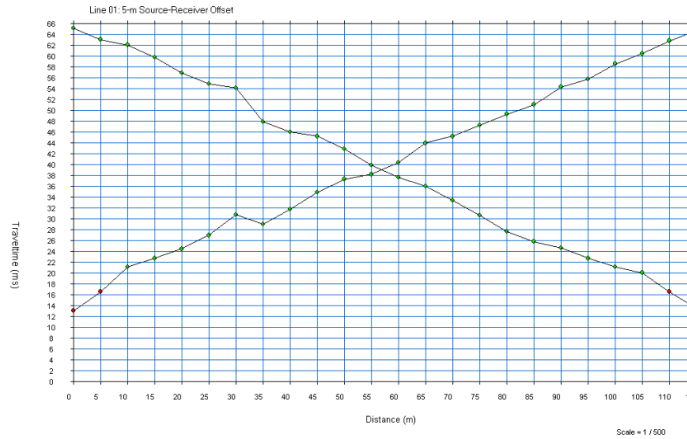
Core and Cuttings



Conodonts



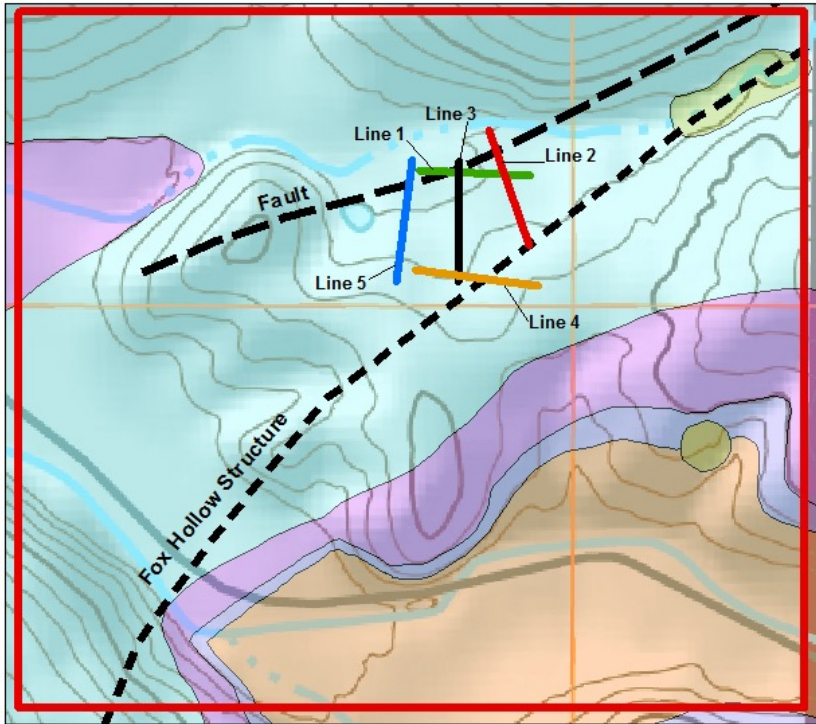
Geophysics (Spring)



0 5 10 20 Kilometers

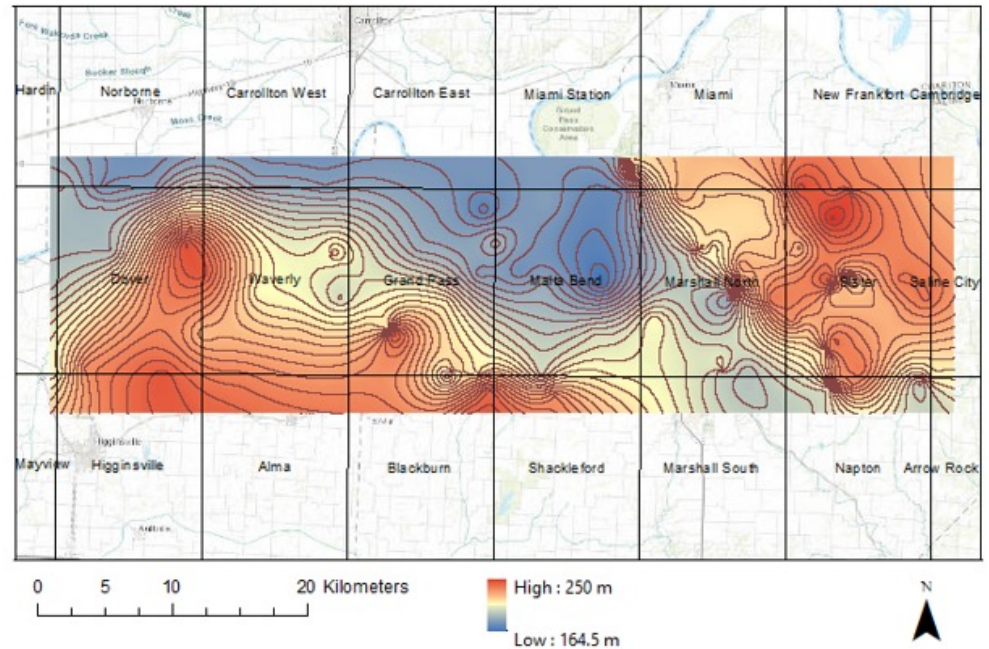


Geophysics (Spring)



Scale: 1:10,000

Four seismic survey lines were ran to get a better picture of the Fox Hollow Structure passing through Fox Hollow on the Ashland 7.5' quadrangle. The black survey line was unfinished due to weather conditions. The seismic work revealed a small fault running parallel to the larger structure.



End of Season Review (Spring)



- SMAC Members invited
- Have full understanding of mapping area
- Showcase unique features



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Drilling (Spring – Summer)



Drilling (Spring – Summer)

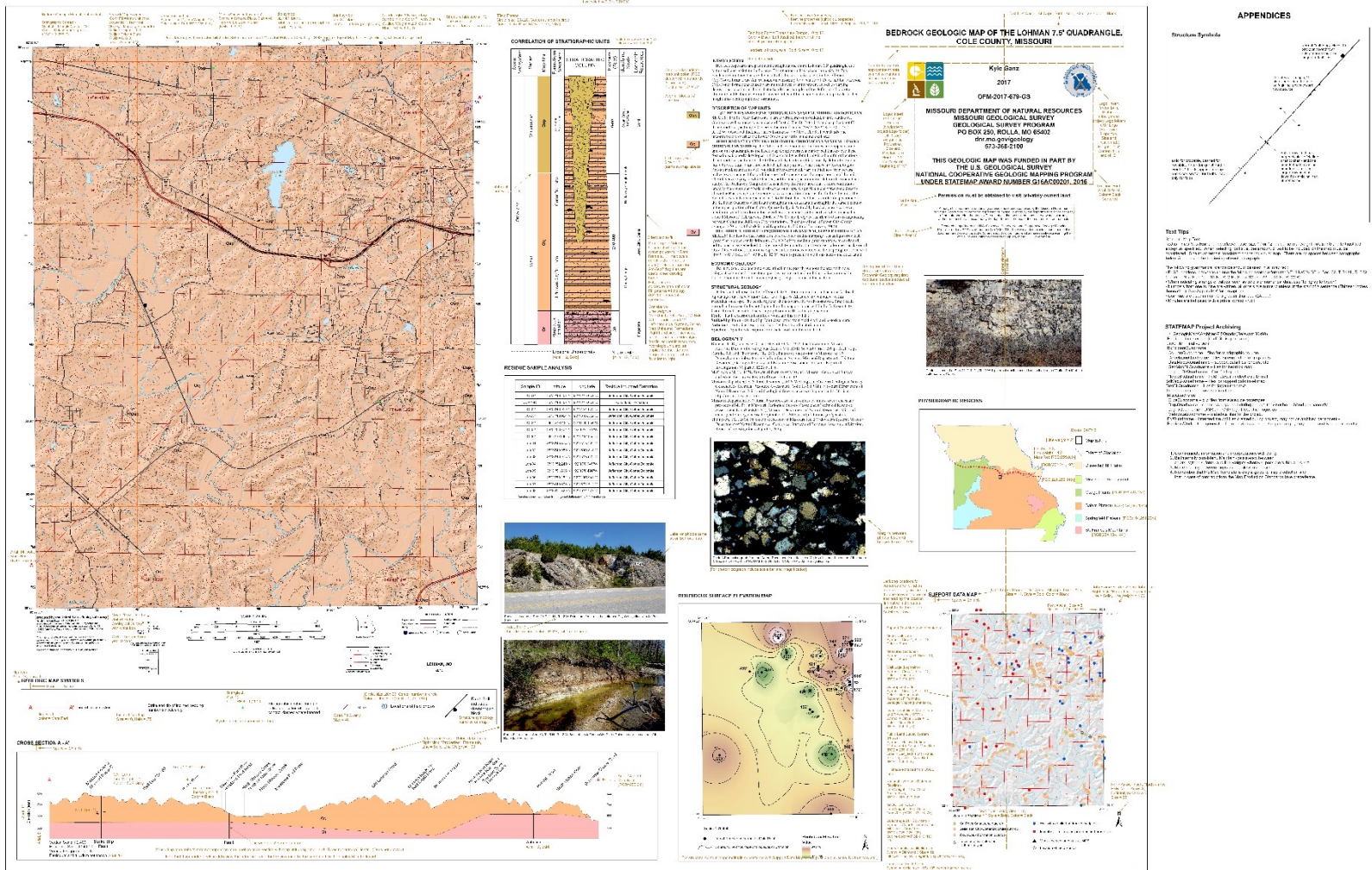


Map Layout (Summer)

- Map polygons
- Unit descriptions
- Support Data
- Generate cross section and strat column
- Text reviews
- Layout reviews
- Mapping Review Committee



Map Standards Template





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Questions?