

20180524

Personal and File Geodatabase (GIS data) for the North Idaho Geologic Map GIS Database. GIS Dataset; Idaho Geological Survey Digital Geologic Map 7.

**Title:** North Idaho Geologic Map (GIS) Database

**Format:** ESRI Personal and File Geodatabase format.

**Keywords:** Geologic map data, north Idaho

**Use Limitations:** Digital geologic map and compilation data intended for non-site-specific use.

**Note About Geologic Map Data:** Geologic mapping is always a work in progress as scientists strive to map at larger and larger scales. The data included here are a mix of scales and quality. Use the *Source\_ID* in each Feature class to link to the *Sources* table to identify the relative quality of each map object. Map-edge conflicts between geologic maps, where not resolved, are shown with intent of letting the user know there are unresolved geologic mapping issues.

**Version:** 5.2018.1

**Database:**

File Geodatabase: NorthIdahoGeologicMapDatabase\_GDB\_10-3-1.gdb

Personal Geodatabase: NorthIdahoGeologicMapDatabase\_10-3-1.mdb

**MXD Files:**

File Geodatabase: NorthIdahoGeologicMapDatabase\_GDB\_10-3-1.mxd

Personal Geodatabase: NorthIdahoGeologicMapDatabase\_10-3-1.mxd

**Schema Diagram:** IGS\_GDB\_5-8-07.pdf

**Projection and Coordinate System:** Transverse Mercator; Idaho Transverse Mercator, NAD 27, meters

**Abstract:**

These data were created from original field work or compiled from existing geologic map data. This Feature Dataset includes the following feature classes:

- attitude (structural field measurements, point symbols; attributes include strike and dip)
- contacts (geologic map unit boundaries and fault boundaries, polylines)
- rock (geologic map units, polygons)
- dikes (dike too small to map as polygons, polylines)
- faults (all mapped faults, polylines)
- fold axes (axial fold trace, polylines)
- linear (structural field measurements, point symbols; attributes include bearing and dip)
- loess (areas of thick loess overlay, polygons)
- saprolite (polygons, limited coverage)
- linesym (miscellaneous geologic features symbolized with lines, polylines)

Note: For more information about each Feature Class, see the metadata. It has been included as a PDF. In addition, the user can view metadata for the entire Geodatabase or each Feature Class in ArcCatalog.

Most new mapping was done at 1:24,000. Use the *Source\_ID* field in each Feature Class to determine original geologic source mapping scale by linking to the sources table in the dataset (this is done for you by taking advantage of the Relationship Classes in this dataset). Data was compiled using IGS Geologic

Map Data Model. This geologic map data compilation includes the following 30 x 60 minute tiles of geologic map data: St. Maries, Coeur d' Alene, Potlatch, Elk City, Kooskia, Nez Perce Pass (Idaho part), Missoula West (Idaho part), and Hamilton (Idaho part).

Dataset includes an ArcMap mxd file with relative paths. Current ArcMap version for the MXD is 10.3.1.

### Using These Data

- Read the Metadata included with this dataset.
- An MXD (ArcMap project file) is included with these data for both the Personal and the File Geodatabases. Relative paths are used. The user should copy both the MXD and the corresponding database and paste into one folder. Then double click from that folder on the MXD to launch data or browse to that folder in ArcMap. Files are in 10.3.1 format. Alternatively, the user may load files directly in ArcMap.
- These data come with many ArcMap Relationship Classes that link the Feature Classes to non-spatial information stored in tables. These linking relationships allow the user to connect to lookup tables and query the data behind the map. For example, the user can connect to geologic map sources, map unit descriptions, landform type, and rock lithologies tables by using the Identify Tool in ArcMap and then drilling in on the results. If interested, use ArcCatalog to view the Relationship Classes.
- Example Relationship Classes to know about:
  - 1) Feature Class **Geologic Map Unit (Rock)** links to table **Map\_unit** (map unit descriptions); then from there, Relationship Classes links to several other tables in the hierarchy including Rx-Desc (lithologies).
  - 2) Feature Class **Attitude** (e.g., strike and dip measurements) links to table **Symbols** (Symbol definitions).
  - 3) All Feature Classes have Relationship Classes that are useful when querying map data. Use the Identify Tool to explore these data.
- A Data Model Schema Diagram is included with this dataset (IGSGDB\_5-8-07.pdf).

**Science Credit:** Idaho Geological Survey staff from 1996-2018 are the main sources of geology; many other sources went into this compilation. Use the *Source\_ID* field in each Feature Class to determine original geologic mapping source.

**GIS Credit:** Loudon Stanford, Steve Mulberry, Linda Tedrow, Jane Freed, Dean Garwood, Theresa Watt, Ben Studer

**Use Limitation:** Digital geologic map data intended for non-site-specific use.

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Known Issues:

- 1) There is no Rock (Map Unit) to Contact relate table (Poly-relate). This table and its relationship classes are mentioned in the Data Model Schema Diagram.
- 2) When using the MXD to view and query these data, keep in mind some symbolization may be wrong or incomplete. Always check the attribution of each geologic object before using these data to make decisions. Symbolization is shown here for viewing purposes and may not be complete.
- 3) Not all attitudes (structural field measurements) are symbolized. Again, check the attributes for the correct table and the corresponding lookup table using the built-in relationship classes.