

Geology Data Model

Data Model User Group

Join the [data model user group](#) if you are an existing ArcGIS customer and want to learn more about design and architecture of personal or enterprise Geodatabase and become a part of Esri's growing data model community.

A workshop was held in Redlands to begin a Geology data model project. At this point, an initial draft of a data model has been distributed to the core design team. As this effort is tested and prototyped we will post that model for general use on this site.

The purpose of this model is to define a geodatabase structure that can be used by organizations that manage large geologic datasets. It is intended to provide a mechanism to store regional or national collections of GeoScience information.

User Forums

Visit the [Esri data model discussion forum](#) to share your ideas, thoughts, and questions with other users.

Downloads - Case Studies

These Case Studies are a good starting point to learn about best practices for this discipline. These project examples include sample geodatabases, map documents, and documentation.

- [Geosciences Case Study](#) geo812.mdb and geo812.mxd files - zip format, 1422 kb
- [Data model presentation from DMT conference](#) ppt - zip format, 1685 kb
- [Geological Survey of New South Wales](#) mdb, mxd, and html docs - zip format, 1795 kb
- [ArcGIS GeoScience Data Model Reference Documents](#) ArcGISGeologyReference.doc and How to create a geoscience database.pdf file - zip format, 427 kb
- [Earthquake Case Study](#) ArcScene document of epicenters in 3D with example of 3D interpolator tool - zip format, 79974 kb

Downloads - Design Templates

The Design Templates are the result of the community-based design process. The general concepts and terms for this discipline are described here. Tools and examples to create a template data model are also included for advanced users.

- [Geoscience Data Model Design Template](#) UML model .vsd files, Analysis Diagram files, uml.dtd file, and .xml file - zip format, 2047 kb
- [Repo812.MDB Geoscience Data Model Repository](#) - mdb format, 3473 kb

- [NGMDB database design documents](#) NGMDB database design documents and class extension - zip format, 3249 kb
- [NGMDB Geologic Map Feature Class Model](#) .pdf - zip format, 665 kb
- [Proposed Arc Geology Version 1](#) .pdf, .xml, .mxd, .txt, .lyr, .shp, .style, .dbf, .prj, .sbn, .PNG, and .img - zip format, 4449 kb

Downloads - Tools

These tools have been developed together with the data models to provide new ways to leverage each industry specific model. They are designed to work with the data model templates and case studies, and can be used with the model, or with other data sets. These tools can be found on ArcScripts, and are not supported Esri software.

- [3D Interpolator Tool for ArcGIS 9.1](#) 3D interpolator tool - zip format, 119 kb

User Community

The Geological Survey of New South Wales has developed an implementation model and deployed it as a geodatabase. The migration to this corporate geodatabase is the first geological Geodatabase in the world to be fully implemented by a Government agency. To see this implementation model visit the [Geological Survey of New South Wales](#).