



Appalachian National Scenic Trail

Geologic Resources Inventory

GIS Data Explanation, July 17, 2024

Geologic-Geographic Information Systems (GIS) data related to Appalachian National Scenic Trail is delivered in a data package Zip (.zip) file. These data are a product of the NPS Geologic Resources Inventory (GRI) program, which is funded by the Inventory and Monitoring (I&M) Division and administered by the NPS Geologic Resources Division (GRD).

Geologic-GIS data for Appalachian National Scenic Trail consists of geologic map footprints of available maps that intersect the 7.5' quadrangles of interest (QOI) for the park. Each footprint depicts the respective map's extent and contains information conveying map name, scale, publication year and type. The footprints are joined using a footprint ID as a key to a standalone table that contains a formal map reference, a Boolean showing if GIS data is available, additional map notes, and a URL link to where the map can be downloaded, if available.

Geologic-GIS map footprints are provided in ESRI file geodatabase format supported by a Pro 3.X map (.mapx) file. The Pro 3.x map displays the footprint data in thematic layers categorizing and symbolizing the footprints by publication year, map type, and scale.

Data packages consist of 1) the geodatabase and associated .mapx file listed above, and 2) a custom python script and toolbox for use in ArcGIS Pro that exports information for a collection of maps based on selected features in the map to a CSV for use in common spreadsheet programs such as Microsoft Excel. Of note, this tool is purposefully simplistic as it is meant to be a proof of concept for how python can be used to extend the out-of-the-box functionality of ArcGIS Pro and can be modified by the GRI to address specific use cases if needed. Please refer to the protocol document for installation and usage information. In addition to the data packages, a protocol document is available discussing how to manage the map footprint geodatabase and how to load and use the python script and toolbox.

The GRI recommends extracting all the data packages to the same folder. This is particularly of importance for file geodatabase as the associated Pro 3.X map file has relative file paths set to the file geodatabase.

Users of this data are cautioned about the locational accuracy of the map footprints and should not assume that they are exactly where they portrayed in software used to display the data. Map footprints were captured to depict approximate coverage of geologic map data and should not be used for site investigations or as control for future work or research.

For a complete listing of Geologic Resources Inventory products and direct links to the download site, visit the GRI products webpage: http://go.nps.gov/gri_products.

For more information about the Geologic Resources Inventory Program visit the GRI webpage: <https://www.nps.gov/subjects/geology/gri.htm>. At the bottom of that webpage is a "Contact Us" link if you need additional information.

You may also directly contact the program coordinator:

Jason Kenworthy
Inventory Program Coordinator
National Park Service Geologic Resources Division
P.O. Box 25287
Denver, CO 80225-0287
phone: (303) 987-6923
fax: (303) 987-6792
email: Jason_Kenworthy@nps.gov

To provide feedback or to inquire about the use of GRI products, contact Jason Kenworthy (contact information listed above).

For information about using and/or obtaining GRI digital geologic-GIS data, contact:

Stephanie O'Meara
Geologist/GIS Specialist/Data Manager
Colorado State University
Cooperator to the National Park Service
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525
phone: (303) 969-2090
e-mail: stephanie_o'meara@partner.nps.gov

For support pertaining to the footprint geodatabase or the python tool, contact:

James Chappell
Geologist/GIS Specialist/Developer
Colorado State University
Cooperator to the National Park Service
Email: james.chappell@colostate.edu

OR

James Winter
Geologist/GIS Specialist/Developer
Colorado State University
Cooperator to the National Park Service
Email: jrhwint@rams.colostate.edu