

## **Alaska Miners Association Annual Convention, Short Course, Monday, Nov. 5, 2018**

**Course Title:** A Workshop Utilizing the Alaska Resource Data File and the Geologic Map of Alaska in GIS Applications

**Presenters:** George Case, Ric Wilson, Keith Labay, U.S. Geological Survey

### **Course Description:**

The purpose of this course is to provide hands-on training for the use and application of the Alaska Resource Data File (ARDF) and Geologic Map of Alaska in various GIS software environments. The ARDF is a database of mining and geologic information for over 7,000 metallic mines, deposits, prospects and occurrences in Alaska. The recently-published Geologic Map of Alaska is a statewide map compilation available in GIS and as a Filemaker Database. This course will give participants the skills needed to further explore and apply these datasets towards answering their own geologic questions.

The course will be split into a morning beginner-level session (8am – 12pm) and an afternoon advanced-level session (1 – 5 pm). Both sessions will run in an open-ended workshop format, such that participants will do the exercises on their own laptops along with the instructors. The morning session is open to all, including first-time users. It will encompass the basics of ARDF and how to search and use the database in the *free* FileMaker Runtime and Google Earth environments. Filemaker Runtime and Google Earth formats of the Geologic Map will also be demonstrated. Participants must bring their own laptops (Windows or Mac\*) with course software loaded prior to the beginning of class.

The afternoon course is designed for GIS users with some ArcMap familiarity. Attending the morning session is not a prerequisite for the afternoon session, but is encouraged if you have not used these datasets previously. The session will cover the basics of importing, exporting, and symbolizing the databases in ArcMap. This will be followed by an exercise demonstrating how the ARDF and geologic maps can be queried in ArcMap to assess mineral potential. If time allows, brief demos will also be made in ArcGIS Pro and the open-source program, QGIS. Like the morning session, participants must bring their own laptops (PC-only) with course software loaded prior to the beginning of class.

Links for necessary software and files are can be accessed here. Participants are strongly encouraged to download them beforehand to conserve time.

### **Software and Data Requirements:**

**Morning (beginner) Session:** A Windows or Mac laptop capable of running Google Earth.

\*Please note that as of August 2018, there have been issues getting the ARDF Filemaker Runtime (a free app) to run on Macs. We are hoping to rectify this by November.

ARDF Datasets for the beginner session can be downloaded from:

<https://ardf.wr.usgs.gov/index.php>

Google Earth Pro software (now free) is available at:

<https://www.google.com/earth/desktop/>

Geologic Map of Alaska in Google Earth (KML) format:

<https://mrdata.usgs.gov/sim3340/sim3340.kml>

**Afternoon (advanced) Session:** A Windows laptop with ArcMap (+Conversion Toolbox) and Google Earth already installed. [OPTIONAL] Have ArcGIS Pro and QGIS installed if you are interested in using these programs.

ARDF Datasets for the advanced session can be downloaded from:

<https://ardf.wr.usgs.gov/index.php>

Geologic Map of Alaska ArcMap datasets can be downloaded from:

<https://pubs.er.usgs.gov/publication/sim3340>

QGIS is an open-source (i.e. free) GIS program that can read much of the standard GIS formats, like shapefiles. It is available at:

<https://www.qgis.org/en/site/forusers/download>

Information to download a trial version of ESRI ArcMap software will be emailed to registrants about a week prior to class.