

Data archive for ElectroMagnetic Alaskan GeoPRISMS Experiment (EMAGE) project. Includes all raw time-series recordings from three profiles (Line 2, Line 3, and Line 5) and relevant metadata as required for processing magnetotelluric (MT) and/or controlled-source electromagnetic (CSEM) responses. The profiles are co-located with active-source seismic transects from the ALEUT project (which share the same naming convention). Below is a description of some of the log files included in the Documents.

* **_BARRACUDA_log.txt**: these log files contain time-series of the positions of two transponders that are surface-towed on paravanes behind the vessel and equipped with GPS. One transponder is towed on the starboard side and the other on the port side of the vessel. NOTE: see Key & Constable (2021) [DOI: 0.1007/s11001-021-09427-z] for details on the Barracuda inverted long-baseline (ILBL) navigation system.

* **_SUESI_log.txt**: these are log files from the Scripps Undersea Electromagnetic Source Instrument (SUESI), a deep-towed transmitter. The logs record relative time, output current, transmitter altitude, transmitter depth, water conductivity, and two-way travel times from the acoustic interrogator (as needed for ILBL navigation).

* **_ATET_SDL.txt**: these are log files from the Tail-End Transponder (ATET) Serial Data Logger (SDL). ATET is located behind the end of the transmitter antenna (see primary array schematics). The SDL records date, time, heading, tilt, dip, and pressure in decibars (i.e., depth). The ATET depth is used with the SUESI depth to calculate the antenna dip angle.

SUESI_sync_times.txt: Used to convert relative time recorded on the SUESI logs to absolute time.