

ID: P2.1-285

Type: E-poster

signatures of underground chemical explosions

Electromagnetic signatures from the Low Yield Nuclear Monitoring PE1 Shot A conducted in October 2023 at the Nevada Nuclear Security Site have been analyzed. The data show signals from the hot, expanding plasma in the Earth's natural magnetic field and from seismo-electric mechanisms. However, the polarization signatures of the prompt signal do not match predictions from a simple "magnetic bubble" mechanism. The implications of the mis-match between the model and the measurements are examined and the consequences for future experiments are assessed.

E-mail

bjunor@lanl.gov

In-person or online preference

Primary authors: Mr JUNOR, William (Los Alamos National Laboratory (LANL)); Mr MACLEOD, Gordon (Los Alamos National Laboratory (LANL)); Mr YANG, Xianjin (Los Alamos National Laboratory (LANL))

Presenter: Mr JUNOR, William (Los Alamos National Laboratory (LANL))

Session Classification: P2.1 Characterization of Treaty-Relevant Events

Track Classification: Theme 2. Monitoring events and Nuclear Test Sites: T2.1 Characterization of Treaty-Relevant Events