



## 2-D Seismic Reflection Method for Identifying Caverns Generated by /LIGHTNING **Underground Nuclear Explosions in Synthetic Data**



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- This work is important because accurately identifying hidden cavities is crucial for monitoring nuclear test ban compliance and understanding subsurface structures quickly to help with tight timing schedules.
- To accomplish our goal, we used 2D seismic reflection data, obtained from seismic wave propagation simulations, different medium configurations and typical seismic processing such as stacking sections to detect anomalies indicating explosion-induced cavities.
- The most important result of our work is that we demonstrated that our approach can reliably identify underground structures, providing a framework of seismic responses, supporting rapid identification of explosion-induced cavities.
- If you want to know more about our work and get into details, come over for a chat in front of our poster at P3.3-502 or send and email to crsebastian@cicese.edu.mx.

