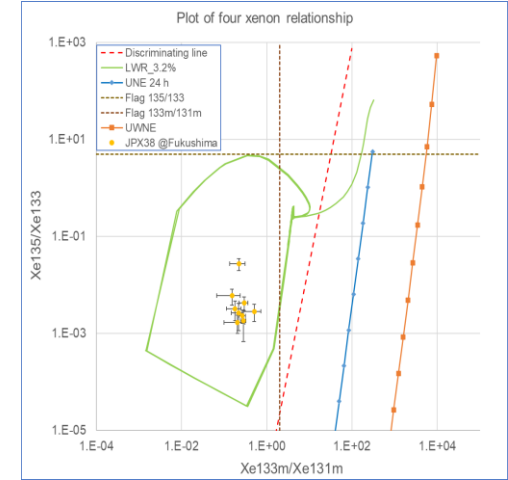


Boxue Liu, Joshua Kunkle, Robin Schoemaker, Yuichi Kijima, Martin Kalinowski
 International Data Centre, Comprehensive Nuclear-Test-Ban Treaty Organization

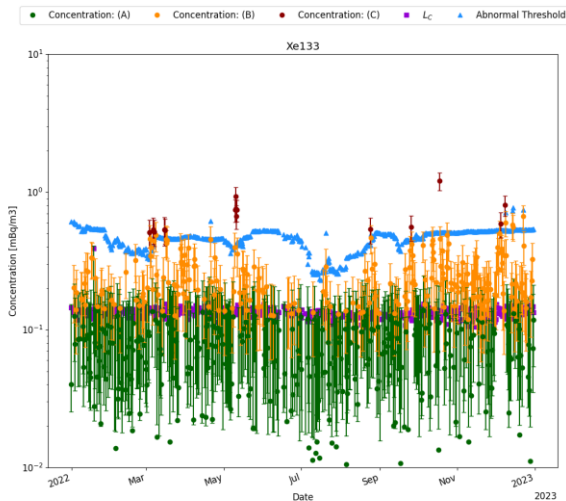
The purpose of the ETA-RN software is to perform characterization of CTBT-relevant nuclear events:

- Discrimination of a nuclear explosion source from release sources of civil facilities using four radioxenon plots. (Nuclear Reactor Domain (left) / Discrimination Line (Red) / Nuclear Explosion Domain (right))
- Estimation of the detonation time using a function of isotopic ratios over time.

Four xenon plot discriminating nuclear explosions



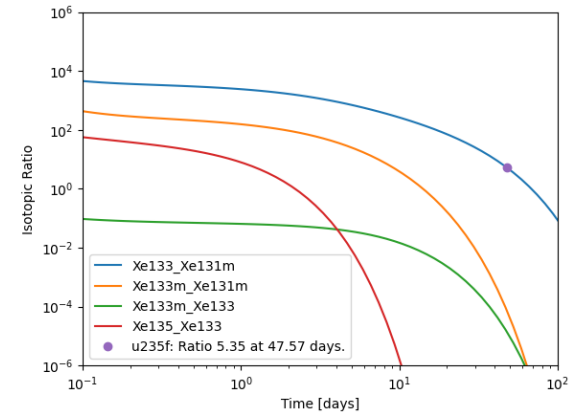
Xe-133 measurements at JPX38



RN detections at IMS stations



Event characterization



Function of isotopic ratios over time determining the detonation time

If you want to learn more about this, come see my e-poster during session 3.6 on Wednesday 21st or access it online on the SnT2023 Conference platform!