

THE STAX PROJECT. A NEW DATA SOURCE TO AID IN TREATY MONITORING

The Source Term Analysis of Xenon (STAX) project is a new effort to better understand the radioxenon background in the environment. The project aims to deploy new high-resolution stack detector systems at facilities that routinely release radioxenon, such as fission based medical isotope production facilities. As radioxenon is detected every day in the International Monitoring System (IMS), the ability to directly measure the releases from these civilian sources contributing to the background could greatly aid in attributing IMS detections. In conjunction with atmospheric transport modeling (ATM), this new STAX data could be used by treaty monitoring scientists to better understand the worldwide radioxenon background that the IMS routinely detects. This presentation will give an overview of the STAX project, including status, detector technology, and data security methods that are being developed.

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