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Stack Data Upload Experiment

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ABSTRACT

Fission-based isotope production inadvertently creates a global radioxenon background that can interfere with nuclear explosion monitoring efforts. While reduction of radioxenon emissions from these facilities is the ideal solution, stack release data from medical isotope production (MIP) facilities has the potential to be used, in combination with Atmospheric Transport Modeling, to better understand the impact of radioxenon emissions on the ability of monitoring stations to detect nuclear explosions. At the fifth Workshop on Signatures of Medical and Industrial Isotope Production (WOSMIP), a small working group was formed to conduct an experiment to develop and demonstrate methods needed to transfer MIP stack release data to a central data repository in a confidential manner and configure the received data into a format that can be incorporated into the International Data Centre operated by the Comprehensive Nuclear-Test-Ban Treaty (CTBTO) Preparatory Commission. We will present current progress on this stack data upload experiment.