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P2.3-286

- Our poster is about a basic data assimilation method called **nudging**, a method to calibrate modelled dispersions in the atmosphere through observational data.
- This is important for **CTBT verification**, because emissions from well-established known radioxenon sources induce **an ever-present, global radioxenon background** signal measured daily in the IMS network. This background can **hide nuclear test explosion signals**.
- Nudging will be used in the Xenon Background Estimation Tool project (**XeBET**), a software project that explores and exploits scientific computing methods to backtrack detections to emissions.
- This poster will explain nudging with examples, while poster **P2.3-231** will present first promising results.

