ID: Type: **Poster**

T2.2-P11. Inverse modelling analysis of Xe-131m measurements over East Asia in April 2013

We have already applied a formal inverse modelling method to the Xe-133 observations in April 2013. It is a Bayesian methodology and is thus inherently capable to account for uncertainties of model and measurements which must be provided a priori. A source estimate is obtained by optimizing an objective function in a way that the discrepancy between model simulations and samples is minimized on one hand while keeping the estimate compatible with its a priori value on the other hand. Since the cost function expresses agreement of samples with a release originated from a given source location, it can be used for identification of the most plausible source regions in cases where this is not known or uncertain. Now, the method will be applied to the Xe-131m measurements. In addition to using the detections at Takasaki (and a set of non-detections), we will also try to include elevated concentrations from Ussuriysk, derive a suitable source assumption, and determine how well this scenario would be compatible with the other data.

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