Discussion: Quantification of uncertainties in the assessment of atmospheric release source with application to the autumn 2017 ^{106}Ru event

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Note to the Editor and reviewers

A mistake in the meteorological fields used in this paper has been found by one of the co-authors. More precisely, the ldX Eulerian transport model codes used to compute the operators assimilated the rainfall fields as cumulative fields when they were in fact decumulated fields. The correction of this error and the subsequent reconstruction of the distributions a posteriori slightly modifies the conclusions of this paper:

- no changes in the position of the source reconstructed;
- the new estimated total release is higher (100-350 TBq before to 200-450 TBq now with the enhanced ensemble of observation operators);
- no changes regarding the interest of the observation sorting algorithm;
- with the HRES meteorological data, the use of several likelihoods which led to:
  - a major impact on the distribution of coordinates reconstruction;
  - a minor impact on the distribution of the total release reconstruction;

  now leads to a moderate impact on both variables' pdfs;
- in the case of the use of the ensemble of observation operators, the use of several likelihoods in combination with the strategy of integrating the weights of the operators still leads to:
  - a major impact on the distribution of coordinates reconstruction;
  - a major impact on the distribution of the total release reconstruction.