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Interactive comment on "Comment on "Global risk of radioactive fallout after major nuclear reactor accidents" by J. Lelieveld et al. (2012)" by J. Lelieveld et al.

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For modelling the propagation of radioactive materials from desastrous failures in NPPs it is not at all relevant whether any such accident resulted from human error. For Fukushima the initiation came from the tsunami, but pointing to the lacking precautions for reactor safety is not any relevant topic of this manuscript.

Please note also that 'fall-out' was originally coined for the debris of atomic bomb testing. This material - testing above ground - consited mainly of glas beads which included the radioactive matter.

This was quite different for Tschernobyl where the deposition occured with the pre-C6487

cipition of rain. I am not aware how physically the radio-Caesium of Fukushima was transported (except by water effluents).

However, this aspect is not essential for this manuscript.

It is totally false to state that the core-melt had let to the two INES-7 accidents. The melt-down was only a secondary, but essential factor, enhancing the evaporation of radio-nuclides. It is not evident why the authors insist and re-iterate that core-melt was the initial cause of the devastation of the facility buildings.

It is still maintained that the political discussion at the beginning of section 7 does not belong into a scientific/technical paper!

On top of all, the statements made are false, ignorant of facts.

The phase-out of NPPs in Germany had long before been established by the then red-green Federal Government; the actual black-yellow government had not changed this fundamental decision but added a limited prolongation of the granted duration of operation. This prolongatiopn was revoked by the actual government, and additionally 8 NPPs have been switched off immediately. The partial sentence appended in parenthesis creates the impression that such consideration has been the rational of the decision of the Federal Government; this is a false imputation. The authors fundamentally failed to make unmistakably clear that both observations are not at all linked to each other.

For this reason it would be most appropriate to delete those sentences.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 19303, 2012.