Interactive comment on "Spatial datasets of radionuclide contamination in the Ukrainian Chernobyl Exclusion Zone" *by* Valery Kashparov et al.

A. Zaitsev (Referee)

andrey.zaytsev@biogeo.ru

This is the very nice and well-written manuscript which will definitely help to increase awareness on the publicly available data about radioactive contamination distribution in the vicinity of Chernobyl NPP. I have only few editorial remarks to it and I am sure that it can be accepted for publication after minor revision. General comments I suggest rearranging the abstract a bit. After the first sentence please place rationale of the paper and the value of the described datasets which are currently in the end. Then you may describe types of data available. It would be also great if in the abstract the authors could have the finalizing sentence elaborating, for whom and for which

purposes the presented datasets could be valuable. It would be great if in the final section on data use could be extended to accommodate vision of the authors on how and who could use the data. Indeed, there is no doubt among professional radiologists and radioecologists on the value of these datasets, but after introducing such analysis it may attract interest from the broader audience. For example, these datasets are truly priceless for the environmental risk assessments associated with the currently ongoing illegal amber extraction to the west from the CEZ and even within it. This is especially important as mainly this amber is further smuggled to the EU and China thus creating not only local risks but also risks of illegal transboundary transfer of radioactive materials. Finally, there is obviously some technical error in the section titles numbering starting from L157. I also suggest if the journal format allows that to include sections with the particular datasets description as subsections of Section 2 (Data).

Specific comments. L14 remove "to be nade publicly available" L16 Introduce the "CEZ" acronym. L17 . . .in soil (. . . L20 . . .that would provide. . . L42 . . .to a smaller extent. . . L42-43 . . .are a consequence. . . L56 . . .mobilization. . . (?) L79 . . .radionuclide deposition. . . L153-156 remove numbers, they are redundant as you use color as well. L157 and below see general comment on section numbering. L168 Please provide the name of the device producer to keep it consistent with the descriptions of other devices. L171 . . . to what is now officially adopted as SOU. . . What is SOU, by the way? L226 Maybe here you need to explain whether this was done in accordance with the USSR standards abbreviated as GOSTs. I am not sure that many people remember this immediately. L232 skip "countries" L261 . . .resulting solution. . . L265 Additional 12 samples.. or . . .An additional set of 12 samples. . . L272 Which "further site"? L277 . . .large amount of uranium. . . L280 . . .were predominantly deposited at the distance of 2-5 km from the. . . L316 An additional set of 294 . . . L382 could you maybe present these formulas using the special formula-building plug-in? the will be much nicer then. L413 and further. I presume this is Ivankov municipal district which you are talking about. Please use this term consistently across the text. L414 . . .The geographic coordinates. . . Figure 3. I think it is important to show the readers where

Ivankov municipal district is located relative to ChNPP and maybe Kyiv. Please introduce a small map in the upper left corner of the figure showing the location of the district within NE Ukraine. L431 Do you mean lids? Were they 10 cm in diameter or 10 cm thick?