

Dear Editor,

Thank you very much for your help in the submission process. Below, I address the corrections point-by-point. These corrections appear in red in the text. I have also added a paragraph at the end of the paper concerning model/code availability. However, I did not understand your comment about previous modifications you suggested to me in order to improve the grammatical accuracy and readability after my initial submission. Indeed, I have checked your different suggestions and they appear correct to me. For example, you had asked me to add explanations for PYVAR acronym and if you look at line 13 page 5 I have added it. So, if you think I forgot to implement some of yours suggestions, could you specify them to me? Thank you very much.

Robin Locatelli

Technical corrections

- **1. Abstract line 23: correct spelling to pertub**
Ok, done. I have changed "pertub" in "perturb".
- **2. Introduction line 17: remove white space between name of author and ,**
Ok, done.
- **3. Section 2 line 3: replace "more properly" with "better"**
Ok, done.
- **4. Section 2 page 9 line 11, correct spelling of self-sustainement**
Ok, done. I have changed "self-sustainement" in "self-sustainment".
- **5. Section 3.1, page 13 line 18: replace "is the confirmation" with "confirms"**
Ok, done.
- **6. Remove italics for 222Rn everywhere in manuscript**
Ok, done.
- **7. Section 3.2.1 line 24, correct spelling of "depended"**
Ok, done. I have changed "depended" in "dependent".

- **8. Section 3.2.1 page 15 line 6: correct spelling of "primilarly"**
Ok, done. I have changed "primilarly" in "primarily".
- **9. Section 3.2.2 page 17 line 15, correct spelling of "fastly"**
Ok, done. I have changed "fastly" in "strongly".