Interactive comment on “Nitrous oxide emissions from riparian forest buffers, warm-season and cool-season grass filters, and crop fields” by D.-G. Kim et al.

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This is a well-written paper tackling the relevant issue of the N2O fate’s. With regards of its improvement, I suggest the following:

1. Be cautious in your conclusions, since your new numbers are based on a single site. You need to provide a convincing reasoning on the practicality of the new numbers if they require additional effort for the potential application to the IPCC.

2. Clarify the procedures used. Describe the constraints of using 2 rows of wells for the appropriate description of the water flow path. The way you were calculating the cumulative annual flux of nitrate and nitrous oxide would require further description.

3. Check for the SA
in the corn fields and soybean fields; by now is exactly the same. 4. Please provide a reference to justify why the age of the buffer could be essential for the N removal efficiency. 5. Though you did not measure the primary productivity and its relationship to NO$_3$, do you have any indication on whether it was relevant for the NO$_3$ fate?

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