

Review of: The export of African mineral dust across the Atlantic and its impact over the Amazon Basin

By:

Wang et al.

General Comments:

The authors have provided a thoughtful consideration of my earlier comments. I am happy with the overall quality of the manuscript. I still recommend a few adjustments in the minor comments, but I will be happy to recommend publication after these small suggestions are at least considered.

Specific comments:

I. 541 It made me confused when I read a DOD value higher than the AOD. I went to the references mentioned and saw that the DOD of 0.18 was found in the strongest dust event measured, while the AOD of 0.14 is the average value during dust events. Maybe you should rewrite this sentence to make this clearer, as now it might be confusing.

I. 560 I think you meant “exists” instead of “exits”.

I. 642 You discuss the matter of the compensation of hydrologic losses of nutrients by Saharan dust in section 4.3.3. In the paragraph starting in line 589 you present values and discuss uncertainties. You discuss that the dust nutrient input could compensate for the hydrologic losses, but the amount of compensation depends on a few uncertainties. Just by comparing the estimated hydrologic losses presented in that paragraph with the estimated inputs you show in line 641, one sees that the dust nutrient inputs might not be enough to compensate for the losses all by itself. As you correctly wrote in line 607, more work is required in order to have clearer answers on that. For that reason, I would be more careful with the wording in line 642. “Which may well compensate” might lead the reader to conclude that the dust nutrients input is more than enough, while your own results show that this might not be the case.

Table 3. I would include “estimated using (...)” in the title. To clarify that these are results of simulations under certain conditions. This information is already in the text, but I believe it is important to have this kind of information in the title or legend of tables or figures.