

Interactive comment on “A preliminary assessment of peat degradation in West Kalimantan” by G. Z. Anshari

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Response 1: I have presently used selected variables in order to indicate peat degradation. These variables include Organic Matter (OM), Total Organic Carbon (TOC), Total Nitrogen (TN), and Total Sulphur (TS). These variables are very common, and are relatively easy to measure. That is why, I think, these variables are sufficiently satisfactory to indicate peat degradation.

Response 2: In this paper, I define peat degradation as a significant change of major peat properties that enhance peat decomposition. Consequently, peat degradation reduces a major ecological function as Carbon storage. I do realize that peat degradation is a complex process, and can be look at from various angles or perspectives. For an example, if peat is used for agriculture, decomposed or degraded peat is preferable

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because the decomposed peat (i.e. sapric) is more fertile than fibric or hemic peats.

Response 3: I agree with you, will use TOC as an indicator of peat degradation. I will present OM in this paper in order to show that peat greatly consists of partially decayed organic matters derived from dead vegetation.

Response 4: This preliminary finding indicates that N is extremely low and total S is sufficiently high in degraded peatlands. This phenomenon occurs because peat degradation in this coastal peat site (DSP) is related to use of fire. Peat burning has caused the conversion of Nitrogen in peats into NO_x. Subsequently, TS becomes high due to seasonal inundation of sea water or salt water intrusion into this disturbed site.

Response 5: I agree! I will change selected tables into figures. At this moment, the manuscript is still under revision.

Response 6: Yes, I am not a native English speaker. I will ask a native English person to edit the revised manuscript.

Response 7: Thank you very much for these useful comments.

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