

We very much thank the reviewer for the thorough and constructive reviews on the manuscript. Below we give a detailed response to the final comment and we discuss how we used the comments to improve the manuscript.

*The reviewer comments are shown in italic fonts, our answers are in blue (normal fonts). Proposed changes in bold.* When referring to figures in this response letter, the prefix 'R' is used before the figure number.

*Reviewer #1 (Sophie Wilkinson):*

We are again very grateful to the reviewer for the very thorough review of our paper. The final comment was very helpful to improve the paper even further.

*Line 85: "While the impact of peatland hydrological conditions on peat fuel moisture is trivial, the moisture content in living vegetation also depends on peat moisture content (Harris, 2008)." This is a new sentence to replace some old wording and I'm unsure of what is being referred to throughout - peat hydrological conditions - is that peatland type (bog, fen, swamp) or other? Inclusion of the word "also" confuses me because the first and second halves of the sentence appear to be arguing in opposite directions.*

We understand the confusion with the current phrasing and have changed it to make more clear what was meant:

For late-season fires, the majority of the fuel in peatland fires is expected to be peat organic material and to a smaller extent living vegetation (Davies et al., 2016). The moisture content of the peat organic material is directly linked to the simulated groundwater level and soil moisture content derived from PEATCLSM simulations. Additionally, peat moisture conditions are known to influence the moisture status of living vegetation as e.g. shown by Harris (2008). Due to the shift towards more living vegetation from early to late-season fires and the related higher importance of peat moisture status both for below and aboveground fuel properties, we hypothesize that the replacement of the various FWI moisture codes will have different effects on estimating early and late-season fire danger.