



May 7, 2024

Dear Dr. Smith,

Thank you for the opportunity to revise and re-submit this manuscript for your consideration. We have addressed all of your and the reviewers' major and minor comments.

The major revisions include: i) a rewrite of the discussion to streamline the major arguments on potential solutions and emphasize the key advances of this contribution; ii) an analysis and supplemental Figure S4 of the daily reported structure loss and maximum daily fire growth rate, which give us confidence in our approach; iii) additional methods description to clarify what data we are using and for what purpose, given the multiple datasets on both structure loss and settlement exposure; iv) addition of text on the mechanisms of structure ignition and loss; and v) an additional supplemental Table S5 on fast fire thresholds at the state level, as we think this will be of great interest at this scale of government and hazards response. Overall, these efforts were inspired by your editorial comments and the reviewers' comments and have substantially strengthened this manuscript.

The key contributions we made in the original submission are still robust. Fire speed should define a new class of destructive events, what we term 'fast fires.' Further, this manuscript provides the first national-scale analysis of fire growth rates and documents that fires are growing faster. Our results will be extremely important for fire management and planning.

Please find enclosed a complete point-by-point rebuttal and revised manuscript. This revised manuscript's main text is less than 3500 words and has 5 main display items in the appropriate format, with an expanded supplement. We acknowledge the cost for color images in the main text and would like to move forward with color images. Please note that we do not have any papers that have been submitted or that are in press that directly relate to the revised manuscript.

Thank you very much for your consideration. Please note, I will not be available via email May 24-27th.

Best regards,

A handwritten signature in black ink, reading "Jennifer K. Balch". The signature is fluid and cursive, with the first name "Jennifer" and last name "Balch" clearly legible.

**Dr. Jennifer K. Balch**

Director | Environmental Data Science Innovation & Inclusion Lab (ESIL)  
Associate Professor | Department of Geography  
University of Colorado-Boulder