

RC2: ['Comment on bg-2023-19'](#), Anonymous Referee #2, 28 Aug 2023

The study addresses a single fire event in a small Mediterranean island, estimating the area burned and its distribution by vegetation type and providing fire severity maps (but the authors don't even give figures for each severity class extent). Then some account of the short-term response of the invasive grass is reported. I don't think the results are relevant enough to warrant publication as a full-fledged paper and I would see it better as a research note (if included within the journal's types of papers). Also, the authors do not seem familiar enough with fire terminology and concepts, see comments below.

Thanks for your review. In order to make the contents more relevant to an international readership, we will test the homogeneity of variance and the correlation between vegetation types and the fire intensity. As for the vegetation recovery, in order to provide more circumstanced results, we went to Stromboli in the first half of September 2023 to carry out some additional surveys in the study area. We hope this would substantially improve the content of the paper and make it much more focused. We will revise the fire terminology and concepts following your comments below.

Specific comments

L48. Shrub and shrubland should be used preferentially to scrub and scrubland.

We will follow your suggestion, thank you

L51. Arson respects to incendiarism, not to negligent fires. Correct here and elsewhere.

We will delete "due to arson,"

L77. Postfire damage?

We will replace "the post fire damage on local vegetation" "the effects of fire and the short-term vegetation response"

L82. I don't think the Study area description should be so exhaustive/detailed. Please revise and maintain only what is relevant for the reader to understand the study context.

We will shorten the study area description, also following the suggestions of Reviewer 1

L109. By chance or by design, given differences in fuel characteristics? You cannot really know, so please eliminate "by chance".

Ok

L111. You are assessing degree of change. Damage can be hypothesized or inferred, but it is not being measured. Change here and elsewhere.

We will replace it with “fire severity”, “fire-driven vegetation loss”, “fire-driven vegetation changes” or “fire-driven vegetation dynamics”, depending on the context

L142. “the best performance”. This is debatable, as several studies have shown that other NBR-based indices provide a better assessment of fire severity.

Agree, we will replace “has the best performance” with “performs well”

L146. Replace “damage severity” by “fire severity”. A positive dNBR indicates biomass change (consumption or scorch).

Ok

L167. “bushy grass” seems awkward, please improve.

“bush grass”, maybe?

L167-187. Again, all this description is unnecessarily long.

We will shorten it

L190. A severity map.

Ok

L200. Revise the Results to move methodological components to Methods.

Ok

L235. You can write “burned” or equivalent, but don’t use “destroyed” as it conveys a charged and potentially biased perspective of fire effects.

Ok

L289. The Conclusions are not really conclusive, as new information is introduced and discussed. Perhaps the study does not even need a Conclusion, and concluding remarks can be included in the Discussion.

We will modify the conclusion accordingly

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