

Nat. Hazards Earth Syst. Sci. Discuss., author comment AC2
<https://doi.org/10.5194/nhess-2022-116-AC2>, 2022
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Reply on RC2

Ivana Čavlina Tomašević et al.

Author comment on "The 2017 Split wildfire in Croatia: evolution and the role of meteorological conditions" by Ivana Čavlina Tomašević et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2022-116-AC2>, 2022

General comments

The comprehensive analysis and diagnosis of weather and associated fire behaviour of the 2017 Split wildfire in Croatia were presented in this study. The manuscript is well written, and the analysis and discussions flow well. The scientific questions are well defined in the study and the results from analysis presented as figures and tables provide good supports to the answers.

Response: We appreciate the appraisal from the reviewer. When we prepare the final manuscript we will revise according to your minor comments as in our responses below.

Very happy to see the robust discussions of how synoptic, mesoscale, and local weather influence fire behaviour in this study. But we know wildfires would also simultaneously impact weather, hope to see there's a future study on the feedback from Split wildfire to the local weather too.

Response: Thank you for this insightful comment. We agree that the heat and moisture from the wildfire event may have modified the weather (which consisted of the large pressure gradient and the LLJ). We are performing numerical modelling of the event using both weather model and weather-fire coupled model, and based on which will diagnose such feedback processes. We will mention this as future research in the concluding remarks.

A Few technical comments are listed below

- Figure 8 and Figure 10 are not referenced in the main text

Response: Thank you for pointing this out. We will add quotation of these two figures in the final manuscript.

- Lines 530 to 553 seems only presenting discussions on Bura (section 5.2), and discussion on LLJ appear after line 554 (section 5.3). If that is the case, title of section should be amended to only include Bura.

Response: Thank you for this suggestion and we are sorry about the confusion. Also based on a comment from RC1, we will rename section 5 as "Summary and Conclusion", and for

the sub-sections "5.1 Summary", "5.2 Further discussion on the dynamics of bura" and "5.3 Concluding remarks".