Natural Hazards and Earth System Sciences
Discussions

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2
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Comment on nhess-2021-131

Damiano Vacha (Referee)

Referee comment on "Data-based wildfire risk model for Mediterranean ecosystems – case study of the Concepción metropolitan area in central Chile" by Edilia Jaque Castillo et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-131-RC2, 2021

I really appreciated the article, which concerns a very important issue (the fire risk in WUI) and which needs to be thoroughly investigated. The overall structure of the paper is well balanced in its parts, the methods used are clearly presented and the assumptions made are justified. I agree with the observations made previously, especially as regards the need to present the results in figures/maps to make reading easier.

I would like to suggest that you specify a few points:
Line141-142: What are the characteristics of this database? How many fires? Are the data punctual or spatial? What is the extent of the burned areas? How are the fires distributed over the observation period?
Line 234-239: has the reliability of the database been assessed? Could the increased occurrence of fires near urban areas and roads be due to a sampling bias, caused by easier detection of fires in busier areas? Do the three sub-databases (Fixed terrestrial, Mobile terrestrial and Aerial detection) have the same spatial extension and resolution?
Line 269-274: Did you also evaluate the contribution of the slope and aspect themselves, not embedded in the solar radiation calculation?