

Predicting Potential Fires in Indonesia by Analyzing VIIRS Night Data during 2018 – 2022.

Response to the reviewer's comments

No	Reviewer comments	Response
1	[Section Headings:] all headlines are (1), and font is not consistent somehow;	The headlines are corrected and the font is all arial now.
2	[Abstract:] with the MinMax Scaller (also further down below in text),do you mean the scaler? -> please correct.	Yes, sorry for the typos.
3	Also, please reword "based on the MinMax Scaller concept" to "using a MinMax Scaller" (because the ANN is a much more important concept than the Scaler).	Because of potential duplication of the word "using", instead we write the following. By using the ANN prediction model with the MinMax Scaler, we choose variables temperature, radiant heat intensity, and source Footprint.
4	Please also have the abstract language checked by a C2 English speaker.	
5	[Figure 2] it shows a ANN with 3 hidden layers. Please replace that figureby an ANN with 2 hidden layers (as cited in 2.3) or write in the figure caption that three hidden layers are shown, while two are used in this work. Please also rephrase "flow chart" here, it is rather a "scheme" we would say.	The figure has been replaced by ANN with 2 hidden layers. We replace "flow chart" with "scheme".
6	[Section 2.3] Here it is not clear how the data set is separated into training and test data. To my understanding such separation has nothing to do with the classifier used later, but with the data selection - but the text reads opposite. Or is the same classifier used in two different instances here - for data separation and actual classification?	We clarify how to divide data into training and test data.
7	Please rewrite the section to clearly state how you separated the datasets and also which are the inputs: The text only states temp, radian, and source, but Figure 2 shows Lat, Lon in addition. [Section 2.3] If Lat, Lon are really going in as an input, it seems relatively likely to me that the model learns some unreal pattern, as the real pattern of lat-lon dependency of fires probably depends on small-scale things such as topographic features. So if you take lat,lon just as additional parameters here, please state the caveat somewhere, that this is an experimental attempt to include these as parameters, where the influence of these	We correct it by stating that the input is only temp, radiant, and footprint source. We are sorry for the mistaken information.

	parameters have still to be determined (unless you can state otherwise from your research).	
8	[Section 2.3] How has the labeling as "flame" and "no flame" been done for the training dataset? I mean, there must be some real assessment of fire or additional information of fire going in, because otherwise, you would just learn the previous way to label it based on temperature again? Please clarify in the re-written section.	Yes, we use real data. We add information in Section 2.1 about the assessment that has been done by NOAA (National Oceanic and Atmospheric Administration) using VIIRS. We write: "We collect 17,532 data from dates April 4, 2019 – September 25, 2019, which are the results of afternoon surveillance from 15:25:27 to 20:01:10 GMT+7."
9	[Section 2.5] Here, if lat/lon are taken into account as parameters (Figure 2), then you would probably have also to show the lat/lon dependency of flame/no flame, as it might be important?	We do not use latitude and longitude information in this research. We correct the figure and the related sentences in the article.
10	[Page 7, lower part - Discussion] Please correct heading numbering. Also, the section is incomplete, the sentence suddenly interrupts. Please resubmit with that section completed as well.	We have corrected the heading numbering and complete the section.