Comment on nhess-2021-221
Sarah Trimble (Referee)

Referee comment on "Identification of Rip Current Hazards Using Fluorescent Dye And Unmanned Aerial Vehicle (A Case Study Of Drini Beach, Gunungkidul, Indonesia)" by Hendy Fatchurohman et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-221-RC3, 2021

Unfortunately, I do not recommend this paper for publication at this time. In general, it is a well written manuscript. There are some organization and grammar issues, but those are easily fixed. The barrier to publication is that this manuscript (as it is currently written) does not present new information or knowledge, and there is no motivation or research question being addressed. Although the first sentence of the conclusions states the motivation was to identify rips in this area, that is (a) the first time a clear motivation is stated and (b) that statement contradicts what the rest of the paper clearly shows: the dye release was performed here because it was a known rip current location. In conclusion, the observations of a single 20 min period of a rip current, with well-established methods, does not qualifies as scientifically significant.

However, I think the authors have the beginning of a quality paper. If additional observations and some additional analyses can be added to this paper, it could be resubmitted. For example, the authors might be able to rewrite the paper as presenting new data, if it represents the first dye-tracing with a drone. Another option is that the final statements in the conclusion could also be used as a guide for how to reframe the paper. Each of those could be emphasized throughout a rewritten manuscript as the driving reason for the research (see paper for additional comments on ways the manuscript can be reframed). In its present form, the paper is merely a description of a research effort. To be publishable, the manuscript must be reframed: with one or more research questions clearly being addressed, and increasing the material in each section to support the pursuit of that aim.

The authors themselves reference this work as preliminary. I sincerely hope that they have additional data, and/or can increase the descriptions of referenced literature and how their observations add to that literature. Perhaps they can include additional observations of dye released in this rip, wind and wave conditions, or analysis of tidal data to reveal
new information about the behavior of this rip type. For publication, the authors must resubmit a more substantial manuscript that includes a scientific or technical question being addressed, additional observations, and expanded discussion of how their observations add to the existing literature. Unfortunately, in its present form, the paper does not present new information and does not qualify for publication. I have uploaded a commented PDF with specific places that edits would be required in a future version of this manuscript.

Please also note the supplement to this comment: https://nhess.copernicus.org/preprints/nhess-2021-221/nhess-2021-221-RC3-supplement.pdf