I found the manuscript of Notti et al much improved and I have appreciated the effort the authors put in answering my comments and specific questions. Before publication, I have just few additional detailed and minor comments (listed below), which I would like the authors to address. Line numbers refer to the manuscript with track-changes.

R: The authors would thank reviewer 2 for his/her positive, rapid and accurate revision and for appreciating our effort to improve the manuscript. In this second revision, we further improve the manuscript according to her/his minor suggestions and reply point-by-point here following. The comments are also reported in the track-changes version of the new manuscript.

1. Title, free Sentinel 2 data/images? **R1: Thank you for the suggestion; we added "images" to the title**

2. L11 and land management **R2: Thank you, corrected**

3. L12, I would clearly state :that: it is a two-step procedure, where the first step is "automatic" and based on the analysis of NDVI images to recognize potential landslide area, while the second step is manual and consists in mapping, within the potential areas, the actual landslides. **R3: Thank you for your suggestion, we added the statement, but with some changes: as in the flow chart, we propose the methodology made of several steps (3). As stated in the abstract and introduction, our purpose is made of 2 steps, which may generate confusion. So we used "phases" instead of "steps". Another point is that we used "semi-automatic" instead of "automatic" because the parameters used to create PL are empirically based, and manually set is not a fully automatic procedure like in machine learning work.**

   It is also important to say that our primary focus is on the semi-automatic and fast detection of PL, while the second phase could be as a "comparison/validation" as made in this work, or the high-resolution mapping focused only where the PL map shows high density.

4. L18 We apply this procedure to. **R4: thank you, corrected.**

5. L29, is the activation of shallow landslides (Gariano e Guzzetti, 2016) as defined in Guzzetti et al (2006) and Caine (1980). Remove unfortunately at the beginning of the next sentence. **R5: We corrected the references and removed "unfortunately."**

6. L170, same as for L12 **R6: We modify the text according to the reply R3**

7. L184, implementation of a filter using terrain and other geomorphological properties to obtain… **R7: Thank you, we corrected the mistakes in the sentence.**

8. L202, to obtain a strong contrast: **R8: Thak you, we corrected the typo**

9. L233, on G? > **R9: It is GEE (Google Earth Engine), we corrected it.**

10. L264, this might be a lexical issue but according to me validation refers to testing a model (an algorithm) on an unknown dataset. Calibration and validation cannot have the same (100%) target. **R10: Thank you for your suggestion. We agree that our procedure to check the data cannot be technically defined as a"validation" so we used only used calibration and a more generic "test".**

11. *L290, in the answers to my comments you mentioned that slope was averaged for the 10 m cell, I would add it in the text.* **R11: We added the following sentence to better explain also in the manuscript text:** "*..and adopted to the spatial resolution of Sentinel-2 in the raster calculator of QGIS (i.e. it averages the values of 4 cells of 5x5 m into one cell 10x10 m)."*

12. L370, the Figure you added in response to my comment n. 35 is incredibly clear to explain PP, PD etc. I would add it in the manuscript and Table 3 could be incorporated in the Figure .**R12: Thank you for your suggestion and for appreciating the graphical schema we provided to add a better figure that includes an improved description of intersection TABLE 3, as a legend of the figure**.
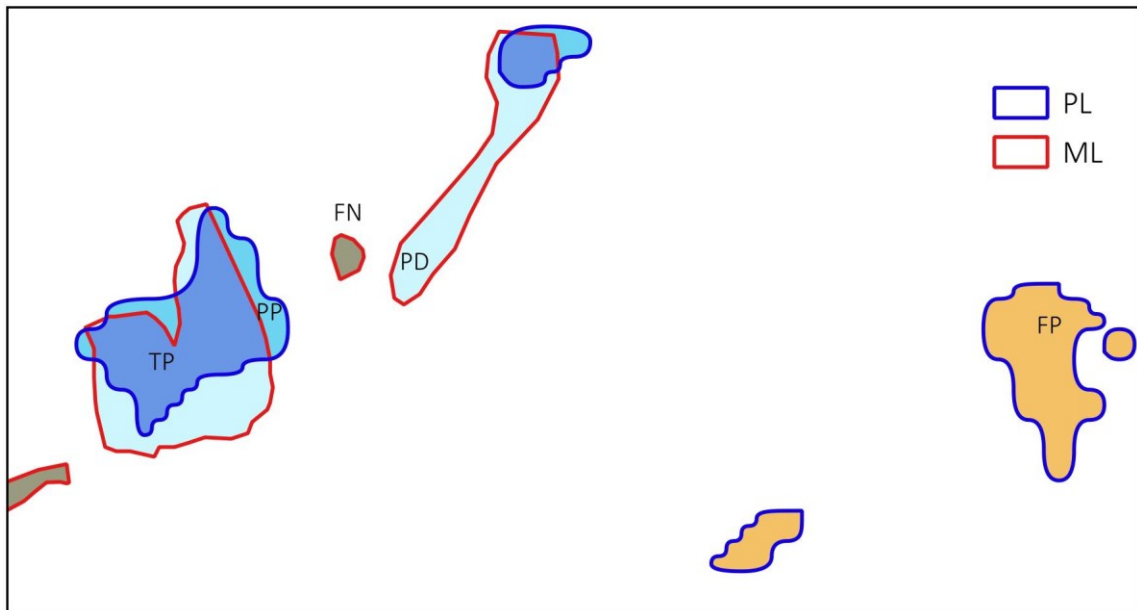
Intersection type	Denomination	legend
Area of the full intersection of PL and ML	True Positive (TP)	
PL intersected by ML but not overlapping, i.e. the part of PL polygon not overlapping by ML is classified as PP while the overlapping part is a TP	Partial Positive (PP)	
ML intersected by PL but not overlapping, i.e. the part of ML polygon not overlapping by ML is classified as PD while the overlapping part is a TP	Partial Detection (PD)	
Detected by PL not Mapped in ML	False Postive (FP)	
Not Detected by PL and Mapped in ML	False Negative (FN)	

Figure 1: Graphical examples and the classification of the possible intersection cases of ML and PL inventory.

13. L505, I recall my comment n. 44 and your answer. I agree that the main aim is to verify the efficacy of automatic mapping to detect shallow landslides, but as you stated in the introduction good inventories obtained quickly can improve damage estimations (i.e., risk assessment), susceptibility models and land management. Commenting on strong points and limits of the inventory you derive with your methodology for different applications (specifically two that are mentioned in the abstract and in the introduction) is interesting! It might be added in the conclusions. **R13: Thank you for the comment. We added some considerations in the conclusions, as you suggested: "*In summary, the PL inventory has strengths, such as its ability to: quickly map large areas, cost-effectiveness, and user-friendly processing. However, it also has limitations, including low resolution and a higher likelihood of false positives. Therefore, the primary purpose of the PL inventory is*

not to generate precise susceptibility or damage assessment maps. Instead, it serves as an initial and swift assessment map, allowing users to identify the most heavily impacted areas. These areas can be targeted for further detailed mapping or on-site field surveys". **About the application of this methodology, we recently made a rapid mapping of the effect of extreme rainfall events that hit the Emilia-Romagna region last May (here is the preliminary map https://zenodo.org/record/7995624) that allowed us to find the area most affected.**

14. L606, effectiveness instead of efficiency? **R14: You are right; "effectiveness" better matches the context, changed.**