

### Reply to Referee Comments

We would like to sincerely thank the referee for valuable comments and suggestions for finalisation of the research article.

- 1) Consistency and clarification of some abbreviations/names, for example, OTSU' versus 'Otsu' should be checked before publication.

Reply:

1. Total document has been verified to comply with the valuable suggestion and modified. The terms like "Otsu", "FwDET", "Floodwater", "LiDAR" were corrected.
  2. Units viz. 5 meter is mentioned as "5m" throughout the document in the text part.
  3. Word to word spacings is corrected wherever required.
- 2) Better to explain and properly cross-reference the 'Kittler and Illingworth minimum error thresholding' in the discussion which is not mentioned anywhere in the document

Reply:

Explained the concept as suggested in line no. 401 to 407.

- 3) It is more unusual to consider the main figure and its legend as two different entities

Reply:

The figure 8 is replaced considering the legend integrated within the figure.

### Other Minor Improvements:

- Figure 3 is replaced by changing the word OTSU to Otsu in the flowchart
- Figure 4(c) is improved for better visualisation of numbers on X and Y axis.
- Line 298: added a sentence "Delineated flood pixels are shown in blue colour."
- Author contributions: First name is added instead of short names in the paragraph.
- Font size of the text in the figures 5,7,8,9 is increased for better visualisation