

## ***Interactive comment on “Constructing a complete landslide inventory dataset for the 2018 Monsoon disaster in Kerala, India, for land use change analysis” by Lina Hao et al.***

### **Anonymous Referee #1**

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This is a well-written paper about different scales landslides occurred after triggering events during monsoon in the SW region of India. The material and the methodology are adequate and well explored. The final result is a very interesting and comprehensive database that can be very useful in planning and management of land use in inland Kerala region. The introduction explores comprehensively the available literature although the objectives in mind are not very clear. The figures are very didactic and of great quality. In the section 3.1 Landslide mapping, the authors should consider to clarify the following points: Please, indicate what LULC means (land use land cover?). Despite the difficulty in identifying landslide from photos and sometimes establish elementary diagnostic features, it will be very helpful if the authors explain how superficial

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slide (SS) can be distinguished from debris flow (DF); and the latter from rock fall (RF), considering the different sources at stake. Bearing in mind that the images have too coarse resolution for a proper correlation with mass movements, how you can discriminate the different landslides? Could the authors give comprehensive explanations why the majority of the landslides, in the 2018 monsoon event, occurred mainly within forest areas? This behavior is mentioned several times, included in the 6 Discussion and conclusions Taking this aspect into account, the authors might include previously, in the section 2.1 Study area, a description regarding the topographic and orographic characteristics of the entire zone. As you know, the slope is a critical issue for this type of movements in addition to a major triggering event. At a same time, those areas are not attractive for human activities. Please, check bibliographic list. Lines 314 and 316: the references Sahana (2019); Ramachandra and Bharat (2019) are not listed.

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