Thank you for the reviewers' comments concerning our manuscript entitled "Spatial analysis of damaged vegetation in the Mianyuan River basin after the Wenchuan Earthquake". Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval.

Comment 1: *Usually vegetation, morphometric (slope ,aspect etc.), litology, etc. has been used from many other authors since last 30 years and .the results obtained from the Authors are similar to the result obtained in other parte of the world.. Nevertheless, an important point was neglected. The Authors do not consider the soil type and depth in their mapping. This factor is one of the most important in landslides susceptibility maps and model for its prediction. This value at the end is included only as a black box in other variable as lithology, slope. Soil depth and type influences also the recovery of vegetation, type, and at the end also the NDVI and its dynamic. (in the discussion the choose to neglect soil type and depth must be discussed)*

Response: Thanks for the referee's kind advice. Just like what the referee said, the soil type and depth are key factors for landslides susceptibility. We would add the discussion about the relationships between vegetation and slope material (soil type and depth), although there is no complete understanding of the interaction between vegetation and slope material.

"Our spatial results demonstrated that the vegetation growth, earthquake-damaged vegetation, and its recovery processes had strong relationships with the topographical and slope material properties. Slope material stability is mainly controlled by the topographical conditions and material properties, and the damaged vegetation is mainly caused by the slope failures during the earthquake. Hence, spatial analysis of the damaged vegetation and its recovery processes is important for understanding what terrain and materials are susceptible to slope failures (or landslide processes). In addition, the recovery of these Wenchuan earthquake-damaged vegetation areas are generally long-term biological process; therefore, it is important to monitor regional vegetation dynamics." (*Zhang, H., Wang, X., Fan, J., et al.: Monitoring Earthquake-Damaged Vegetation after the 2008 Wenchuan Earthquake in the Mountainous River Basins, Dujiangyan County, Remote Sensing, 7, 6808-6827, 2015.*)

Comment 2: *Is not clear what type of observed values has been used to proceed in fitting multivariate models.*

Response: We would like to thank the referee for the valuable comments, which all have been considered in the revised version of the manuscript.

The models were calculated using the stepwise multiple regression method. We calculated the DEM, slope gradient, slope aspect (pre-earthquake) NDVI values in each DSAL region, then all these values were proceed with dimensionless, and then performed multivariate analysis of these variables

Comment 3: *The statistical result of multivariate regression for equation 1, 3 and 4 has been presented only in term of tables where fitting confidents and R2 and also maps with the RMSE error and his distribution. I think that for each case a scatterplot observed vs. Predicted should be presented a in order to evaluate if the error is normally distributed or not, and see if we have and exceedance or deficiency in the predicting probability (with respect observed) in observed range values.*

Response: Thanks for the referee's good evaluation and kind suggestion. We all acknowledge that the model results should be clearly discussed in the revised version of the manuscript.
The models were trained using the statistical analysis methods, and the predicted values may outside the actual range (0.0, 1.0) in some conditions (e.g. the flat areas, steep terrain). We all acknowledge these issues. Hence, we would add one discussion on the validity of the model results.

Comment 4: *The nature of the non linear multivariate predicting equation should be discussed (treated in the discussion, e.g. why this type of equations and its structure).. And should verified their range of validity also at the border of the range of observed variables..E.g. what's happen if we use it outside the observed range of variables: : :and are the probability value obtained always in the range (0, 1.0)?*
Response: Thanks for the referee's good evaluation and kind suggestion. We all acknowledge that the model training processes should be clearly discussed in the revised version of the manuscript.
We all acknowledge that some predicted values may outside the actual range (0.0, 1.0) in some conditions (e.g. the flat areas, steep terrain). For the models were trained using the statistical analysis methods, only the values in the range (0, 1.0) have actual references. When the predicted values are great than 1.0, these area can ben consider as the high instability areas, and the areas with less than 0 values have low instability level.

Comment 5: *The term of stability susceptibility should be, in my opinion changed as instability susceptibility because the higher values correspond to musty unstable areas.is easy for the reader make confusion.*
Response: We would like to thank the referee for the valuable comments, which all have been considered in the revised version of the manuscript.

Comment 6: *Some of the maps required as additional plot s with a zoom to most important areas affected from landslides.. (see. Figure 4 and 6)*
Response: We would like to thank the referee for the valuable comments, which all have been considered in the revised version of the manuscript.