Dear Editor,

International Journal of Environment

Thank you for the valuable and constructive feedback aimed at improving the quality and readability of our manuscript. Those comments were most helpful for us in preparing an updated and more informative version of the manuscript compared to the one submitted before. At the same time, we would like to apologize for taking longer than expected to resubmit due to the holiday season and the extra time spent in project revision and reprocessing to include the most recent observations covering a period from 2000 to 2018. We have attempted to incorporate most of the suggestions provided by reviewers and have provided itemized responses for each of the edits proposed by reviewers:

1. *Land use and land cover map should be included for two different time.*

Response: Land cover maps for the years 2000 and 2018, as well as, a map summarizing change during this period has been incorporated into the manuscript along with supportive narrative detailing the significance to research objectives. The new land cover maps contain only three major land cover classes; forest, developed land, and agriculture. Lastly, we included a table summarizing the change in land cover over time by each administrative region.

1. *Temporal Analysis between NDVI and LST along with air temperature should be incorporated.*

Response: There is generally a strong correlation between LST and air temperatures, however, the degree to which these variables can be modeled at fine scale (~500m) using generalized statistical methods is still an active research question and beyond the immediate scope of this current project. That said, we recognize the importance of the relationship between air and surface temperatures and have started to assemble the datasets needed for better characterizing the nature of this multi-faceted relationship in this particular study region. Future work focused on this relationship will utilize current project data and the latest from the Global Historical Climatological Network and the Nepal governmental Meteorological Forecasting Division.

1. *Correlation analysis should be made.*

Response: Correlation analyses were used to describe linear nature of relationships and the resulting values have been reported as suggested. We used Least Square regression to estimate mean change over time and those beta values have been reported along with corresponding p-values for estimating significance. Figures of resulting distributions are included for clarity.

1. English and grammar can be improved.

Answer: The manuscript was reviewed and edited by a professional editor from Kentucky State University. The revised version, we believe is free of grammatical mistakes and ensures high quality.. In addition, all comments made by second reviewer have been addressed in the appropriate sections. The overall readability of the manuscript has improved greatly.

Finally, we would like to thank the two anonymous reviewers for reading our manuscript and providing the valuable suggestions for improving it. We hope that our work will be accepted for publication in your renounced journal and look forward to hearing the great news from you!

Sincerely

Authors.