

Review of: "A QGIS Grid-Based Study to Understand the Relationship Between Land Surface Temperature and Greenness in Urban Areas"

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Potential competing interests: No potential competing interests to declare.

1. Abstract

- The abstract provides a good overview of the study, but it would benefit from more specificity regarding the statistical analysis.
- The aim of the study is well-stated. However, the abstract can be improved by more explicitly stating the hypothesis or research question that is being tested.

1. Introduction

- The introduction provides a good rationale for studying the relationship between NDVI and LST. However, it would benefit from a more thorough review of recent literature, particularly focusing on studies that use QGIS or other similar GIS tools to investigate urban heat islands.
- While the introduction touches on previous studies, it should explicitly highlight the specific research gap this study aims to fill.

1. Methodology

- The methodology section provides sufficient detail on how NDVI and LST were calculated, but there is a need for more information on the statistical analysis used to assess the correlation between these variables. Was any regression model used beyond simple correlation? Clarifying this will improve the reproducibility of the study.
- The choice of 5 km grid spacing should be justified more explicitly. How does this spatial resolution compare to similar studies?

1. Results

- You mention that the relationship is not statistically significant, but you should elaborate on this. Why might the trend not be significant? Are there external factors (e.g., other land use types) that could be affecting the results? This could open up a useful discussion.

1. Discussion and Conclusion

- The study has clear relevance to urban planning, but this point could be emphasized more. For example, how can policymakers use these findings to mitigate urban heat in Delhi?