Review Form 1.7

Journal Name:	**Asian Journal of Research in Agriculture and Forestry**
Manuscript Number:	**Ms_AJRAF_102513**
Title of the Manuscript:	**THERMODYNAMIC ENTROPY: A NATURAL METRIC FOR LANDCOVER CLASSIFICATION**
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Yes, author has used LST algorithm to calculate surface entropy flux for various LULC.** **No, Try to change the tilte.** **Yes** **Yes** **Somewhat** **No, should add recent article and related article** Reiners, P., Sobrino, J., & Kuenzer, C. (2023). Satellite-Derived Land Surface Temperature Dynamics in the Context of Global Change—A Review. *Remote Sensing*, *15*(7), 1857. Wang, R., Hou, H., Murayama, Y., & Derdouri, A. (2020). Spatiotemporal analysis of land use/cover patterns and their relationship with land surface temperature in Nanjing, China. *Remote Sensing*, *12*(3), 440. Zhang, Q., Wu, Z., Singh, V. P., & Liu, C. (2021). Impacts of spatial configuration of land surface features on land surface temperature across urban agglomerations, China. *Remote Sensing*, *13*(19), 4008. Yuvaraj, R. M. (2020). Extents of predictors for land surface temperature using multiple regression model. *The Scientific World Journal*, *2020*.	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	No, Have to improve	
Optional/General comments	Comments: Author must mention the importance of choosing this study area. • Author failed to mention the clear aim and objective of the study. • Author has failed to mention, why they have selected the year 2013, 2015 and 2017 for the study. • I suggest the author to take recent year for the study; it is been 6 years from 2023. • I suggest the author to include recent reviews that is 2022 and 2023. I know lots of study has been published in LST in international journals.	

	• I recommend the author to make separate LULC for the study area. • Give expansion of DOS • In methodology part author failed to mention how to find radiance value. • In Equation 6, author mentioned T as top of atmosphere but that equation for brightness temperature • Author failed to indicate the calculation of TOA. Which can be calculate by using the equation TOA (L) = $M_L * Q_{Cal} + A_L - O_i$ • Author have to inform which mouth September or October for wet season. • Author have to include more literature review related this topics. • R square value for SEF and LST for dry season is less 2013 as compared to 2015 why this is so much difference • Similarly, SEF and LST for wet season is less in 2015 as compared to dry season, justify it • Similarly, for SEF between NDVI and SEF between LULC justify it. • Author failed to explain the p-value coefficient value for LST, LULC and NDVI for wet and dry season in regression output.	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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