

Review of: "New Method to Identify Potential Illegal Water Use Location by Using Remote Sensing and Neural Networks in Laguna de Aculeo, Chile"

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Potential competing interests: No potential competing interests to declare.

Dear Authors,

Your paper addresses a crucial issue of identifying illegal water use in drought-prone areas using remote sensing and neural network techniques. The research methodology is promising, leveraging spectral indices and unsupervised classification for vegetation health assessment. However, improvements are needed for better clarity and reproducibility.

1. Ensure the title accurately reflects the content of the paper. It is more general and doesn't sound appealing!
2. Provide a more detailed explanation of the methodology, especially regarding the application of the neural network (Yolov3). Consider including a visual representation, such as a flow diagram, to enhance clarity and reproducibility.
3. Address concerns about the absence of validation metrics, such as a confusion matrix and ground truth points. Incorporate evaluation metrics, such as RMSE, to quantify the accuracy of the model and enhance the reliability of classification outcomes.
4. Include time series data from previous years for comparison, providing a more comprehensive evaluation of the impact of water usage restrictions. Additionally, ensure that data presentation, including figures and tables, meets high-quality standards.
5. Strengthen the discussion section by addressing the practical application of the research, potential limitations, and suggestions for future research directions. Emphasize the scalability of the approach to different geographical contexts and discuss the practical implementation of techniques for monitoring and enforcement purposes.

Dear authors, these points collectively aim to enhance the manuscript's overall quality, clarity, and impact. Addressing these recommendations will contribute to a more robust and effective presentation of your research.

Best regards,