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

Wanchang Zhang[1]

1 Aerospace Information Research Institute (AIR)

Potential competing interests: No potential competing interests to declare.

I commend the authors for addressing a timely and critical issue concerning the identification of potential illegal water usage in the Laguna de Aculeo basin. The methodology described in the manuscript, utilizing remote sensing and neural network techniques, is robust and demonstrates a systematic approach towards identifying areas of concern. The inclusion of various soil indices derived from multi-spectral and multitemporal satellite data, coupled with cluster analysis techniques, adds depth to the study.

However, I would like to suggest some improvements to enhance the clarity and impact of the manuscript:

Clarity in Results Presentation: Providing specific quantitative results, such as the extent of illegal water usage detected and corresponding water consumption estimates, would enhance the clarity and impact of the study.

Discussion of Limitations: It would be beneficial to address any potential limitations or challenges encountered during the study, such as data accuracy issues or uncertainties associated with remote sensing techniques, to provide readers with a comprehensive understanding of the study's scope and reliability.

Future Research Directions: Considering the dynamic nature of environmental factors, discussing potential avenues for future research, such as the integration of additional datasets or validation of results through ground-based measurements, could enrich the study's contribution to the field.

Overall, the manuscript presents a promising contribution to the field of water resource management and environmental conservation. With the suggested improvements, I believe it will significantly enhance the quality and impact of the study.