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.

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

For talks about water extraction, we need to have in mind the topography of the area because lakes' water intake and recharge time are related to the hydrological basin and subterranean aquifer, as said by (Ven te chow, 1969).

So if any work should be done regarding water extraction, it would be good to mention and add a topography map, and also to add future work directions in this regard of hydrological analysis.

Figure 4 is hard to read.

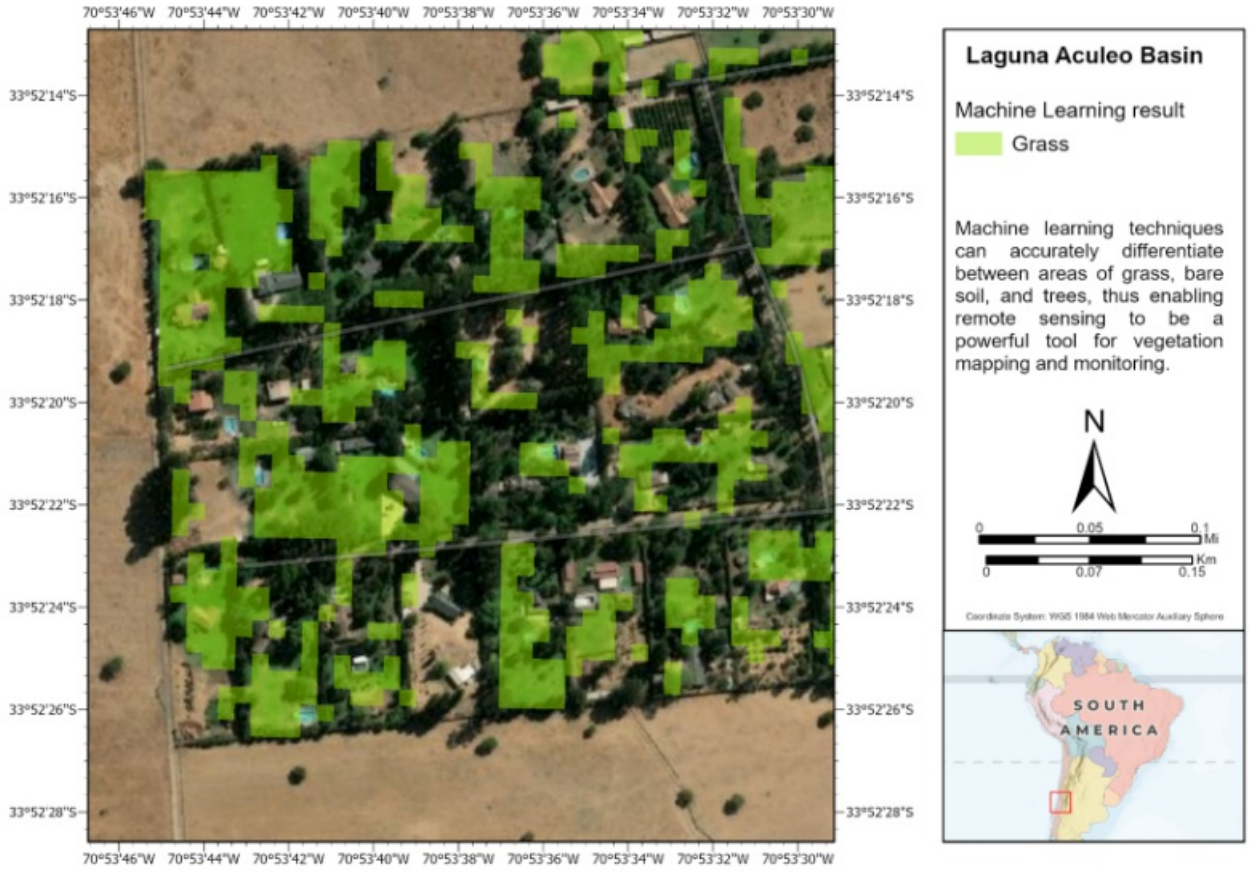

Figure 5. Unsupervised Classification results at Laguna Aculeo

This can be a control problem of your article. There are not only grass in the result, and also the segmentation is very wrong in analyzing this picture. A better segmentation technique should be used.

“This innovation has created a new field of research that eliminates the need to go to the field to obtain information on any study area. In particular, this research has proved that it is possible to assess the health of vegetation cover in an entire watershed over time, and neural networks are a reliable tool for pixel classification and cluster analysis. The research also highlights that the Laguna de Aculeo region has no studies related to satellite information, and the government authorities lack a professional team to develop remote sensing analysis studies. The methodology developed in this study is a turning point in how to assess extensive study areas at high resolution and remotely.”

How can you claim that you eliminated the necessity of field study? You did not prove anything. You should do better writing and watch what you are claiming. You should do a rewrite of your conclusions and discussion.

This research is a cornerstone in establishing the potential use of remote satellite information in other areas of Chile. The implementation of neural networks to correlate input and output values can be applied in any field of research. The next step is to encourage people and authorities to use the interactive applications developed in this study. In September 2022, a meeting is scheduled to present the results and teach people how to use the application.

You are claiming too much with your conclusions. This is not the place; this is a technical work, and you should present technical arguments.

CHOW, Ven Te; MEREDITH, Dale D. Water Resources Systems Analysis: Part 3. Review of Stochastic Processes (HES 21). **Hydraulic Engineering Series no. 21**, 1969.