Assisted teaching and self-learning Virtual tool in Land use and Cover Maps

José Valero and José Herrera (Colombia)

SUMMARY

This paper presents a web computational framework for the evaluation of teaching-learning processes and collective construction of knowledge in the preparation of land use and land cover maps. The proposed computational framework facilitates management from the initial assignment of work to the final delivery of the work carried out, promoting self-learning, and using Open-Source software. The automated evaluation contemplates, on the one hand, geometric consistency based on the precision and coverage of the segment boundaries, and on the other hand, semantic consistency based on the coincidence of the assigned semantic labels. The computational framework allows a flexible configuration of the scenarios required in the student-tutor and knowledge collective construction approaches contemplated. The experiments carried out made it possible to demonstrate the capacity of the proposed computational environment as a sustainable alternative for the improvement of teaching-learning processes in Earth Sciences in training in the generation of use maps and quality coverage.

Assisted teaching and self-learning Virtual tool in Land use and Cover Maps (12409)
José Valero and José Herrera (Colombia)

FIG Working Week 2024
Your World, Our World: Resilient Environment and Sustainable Resource Management for all
Accra, Ghana, 19–24 May 2024