

TS-06

ARTIFICIAL INTELLIGENCE TOOLS FOR SUSTAINABLE MANAGEMENT OF ENVIRONMENTAL RESOURCES IN URBAN AND AGRO-FOREST AREAS

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Natural resources management in agro-forest areas requires novel and effective techniques, in order to combine environmental and economic sustainability.

Artificial Intelligence (AI) techniques have been developed in recent years for these purposes, and are increasingly adopted in many fields (e.g., prediction of hydrogeological risks, monitoring of natural ecosystems, precision agriculture and forestry). In spite of the ample literature on these topics, the research about the AI tools is not exhaustive, since the choice of the optimal technique depends on many environmental factors and economic constraints.

This session aims at bringing together contributions from several contexts, dealing with detailed field experiences, validated models and effectiveness assessment methods.

These contributions should suggest guidelines for an efficient implementation of the most suitable AI tools. The proposal of these techniques should support the actions of land managers in protection of environmental resources in agro-forest areas, and of human and infrastructure heritage in urban sites. From this state-of-the-art, the identification of further literature gaps and future research perspectives will be possible.

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