

# COUNTRY HOT TOPICS

## GOFC-GOLD Network: SCERIN / MedRIN

Country: Bosnia and Herzegovina

### Long-Term Monitoring of Inland Water Quality Parameters Using Landsat Time-Series and Back-Propagated ANN: Assessment and Usability in a Real-Case Scenario

by Gordana Jakovljevic<sup>1</sup> ✉, Flor Álvarez-Taboada<sup>2,\*</sup>  and Miro Govedarica<sup>3</sup> ✉ 

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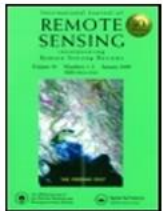
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Remote Sens. 2024, 16(1), 68; <https://doi.org/10.3390/rs16010068>

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#### Waterbody mapping: a comparison of remotely sensed and GIS open data sources

Gordana Jakovljević, Miro Govedarica & Flor Álvarez-Taboada

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Joint Workshop of the GOFC-GOLD SCERIN and MedRIN Networks

CIHEAM conference center, Chania, Greece, July 16 – July 19, 2024

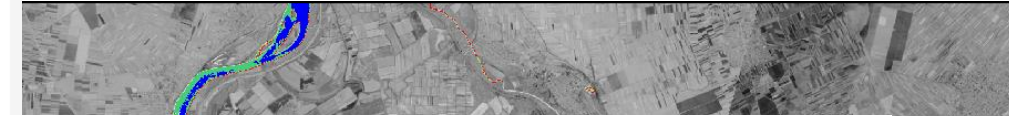
Land Cover Change (LCC) and Extreme Events in the Context of Climate Change

Mediterranean Agronomic Institute of Chania

Region of Crete

Eratosthenes Center of Excellence, Cyprus University of Technology

Aristotle University of Thessaloniki



#### Monitoring spatial and temporal variation of water quality parameters using time series of open multispectral data

Miro Govedarica<sup>a</sup>, Gordana Jakovljević<sup>\*b</sup>

<sup>a</sup>University of Novi Sad, Faculty of Technical Science, Serbia; [miro@uns.ac.rs](mailto:miro@uns.ac.rs); <sup>b</sup>University of Banja Luka, Faculty of Architecture, Civil Engineering and Geodesy, Bosnia and Herzegovina; [gordana.jakovljevic@aggf.unibl.org](mailto:gordana.jakovljevic@aggf.unibl.org);

## Assessment of biological and physic chemical water quality parameters using Landsat 8 time series

*Gordana Jakovljević, Miro Govedarica, Flor Álvarez-Taboada*

Author Affiliations +

[Proceedings Volume 10783, Remote Sensing for Agriculture, Ecosystems, and Hydrology XX; 107831F](#)

(2018) <https://doi.org/10.1117/12.2513277>

Event: SPIE Remote Sensing, 2018, Berlin, Germany

(a)



(b)



Mapping plastic based on multispectral UAV images

Gordana JAKOVLJEVIĆ, Bosnia and Herzegovina, Miro GOVEDARICA, Serbia, Flor ALVAREZ TABOADA, Spain

Key words: UAV, deep learning, plastic detection, PET, OPS, I

(c)





(d)



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Article

## A Deep Learning Model for Automatic Plastic Mapping Using Unmanned Aerial Vehicle (UAV) Data

by Gordana Jakovljevic <sup>1</sup> ✉, Miro Govedarica <sup>2</sup> ✉  and Flor Alvarez-Taboada <sup>3,\*</sup> ✉ 

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remote sensing

## Remote Sensing Data in Mapping Plastics at Surface Water Bodies

Gordana JAKOVLJEVIĆ, Bosnia and Herzegovina, Miro GOVEDARICA, Republic of Serbia, Flor ÁLVAREZ TABOADA, Spain

Key words: plastics, surface water bodies, geospatial technologies, Remote Sensing





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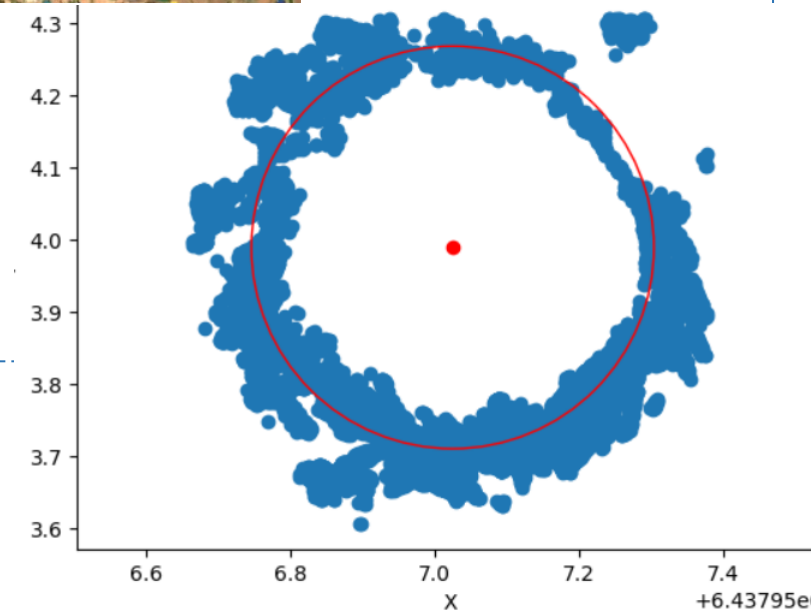
GOFC-GOLD Network: SCERIN / MedRIN

Country: Bosnia and Herzegovina

Team : Gordana Jakovljevic

## Remote Sensing priorities or 'hot topics'

- Inland water quality monitoring:
  - 20 years long time-series for major inland water bodies in Europe
- Detection of aquatic plastic litter
  - Ultra-high resolution satellite images for hotspot detection, UAV images for individual pieces segmentation
- Detection of crop types
  - Detection of five most prominent crop types based on Sentinel 1 and Sentinel 2 time series
- Forest monitoring
  - Segmentation of individual trees and extraction of parameters such as: DBH, Height.



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NASA LCLUC Program

GOFC-GOLD and START, USA





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