Koutsias Nikos

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Studies

Undergraduated Studies
Dept. of Environmental Studies, University of Aegean (1993)

Ph.D. Thesis
Satellite Remote Sensing and Geographical Information Systems for the Spectral Evaluation and Mapping of Burned Surfaces in Mediterranean Ecosystems

Research Interests

- **Remote sensing, Geographical information systems & Spatial analysis**
- **Applications on wildland fires, natural disasters and landscape ecology**
- **Applied multivariate methods**
- **Geostatistics and point pattern analysis with special emphasis on spatio-temporal analysis of wildland fire ignition points**
- **Positional uncertainty and data modeling….**
- **Phenology based on satellite data**
- **Precision agriculture**

Selected Publications

N. Koutsias*, K. Panourgia, G. Nakas, T. Petanidou. 2024. The importance of landscape and fire-history as factors explaining post-fire vegetation recovery in a Mediterranean island using Sentinel-2 satellite data, Science of the Total Environment, 957: 177443.

Carnicer, A. Alegria, C. Giannakopoulos, F. Di Giuseppe, A. Karali, N. Koutsias, P. Lionello, M. Parrington, C. Vitolo. 2022. Global warming is shifting the relationships between fire weather and realized fire-

induced CO2 emissions in Europe. Scientific Reports – Nature, 12 (1), 10365.

Prachi Singh, Prem Chandra Pandey, George P. Petropoulos, Andrew Pavlides, Prashant K. Srivastava, Nikos Koutsias, Khidir Abdala Kwal Deng, Yangson Bao. 2020. Hyperspectral remote sensing in precision agriculture: present status, challenges, and future trends. In book: Hyperspectral Remote Sensing: Theory and Applications Chapter: 8

Ruffault J., Curt T., Moron V., Trigo R.M., Mouillot F., Koutsias N., Pimont F., Martin-StPaul N., Barbero R., Dupuy J-L., Russo A., and Belhadj-Kheder C. 2020. Increased likelihood of heat-induced large wildfires in the Mediterranean Basin. Scientific Reports – Nature, 10(1):13790.

N. Koutsias*, M. Arianoutsou, A.S. Kallimanis, G. Mallinis, J.M. Halley and P. Dimopoulos. 2012. Where did the fires burn in Peloponnisos, Greece the summer of 2007? Evidence for a synergy of fuel and weather. Agricultural and Forest Meteorology. 156: 41– 53.

N. Koutsias*, Xanthopoulos G., Founda D., Xystrakis F., Nioti F., Pleniou M., Mallinis G. and Arianoutsou M. 2013. On the relationships between forest fires and weather conditions in Greece from long-term national observations (1894-2010). International Journal of Wildland Fire. 22(4):493-507.

Koutsias, N.*, and M. Karteris, 1998. Logistic regression modeling of multitemporal Thematic Mapper data for burned area mapping. International Journal of Remote Sensing, 19(18):3499-3514.