

Special Issue

Infrared-Image Processing for Climate Change Monitoring from Space: 2nd Edition

Message from the Guest Editors

The infrared spectral range approximately extends from 1 μm to 1 mm. It is a broad spectrum with variable characteristics that allows one to conduct different analyses on various subjects. Numerous satellite and airborne missions are equipped with spectral bands in the infrared spectrum and new constellations of thermal satellites are being built. These new sensors represent a shift in thermal remote sensing, as new applications emerge with increasing revisit times and spatial resolution. Innovative image processing techniques are appearing to account for the changing image parameters. Traditional applications that use thermal infrared vary from agriculture to security. However, thermal remote sensing can also be used to conduct analyses of climate change effects on the Earth's surface. Land Surface Temperature changes, vegetation health, and other aspects can be observed using thermal spectral bands. Additionally, extreme events, such as heat waves and drought, can be monitored from space on a much more detailed scale than before. An increase in revisit time even allows for analyses of diurnal heat cycles and man-made processes, such as gas flaring.

Guest Editors

Prof. Dr. Ralf Reulke

Department of Computer Science, Humboldt-Universität zu Berlin,
10117 Berlin, Germany

Dr. Agnieszka Soszyńska

School of physics and astronomy, University of Leicester, Leicester LE4
5SP, UK

Deadline for manuscript submissions

closed (30 September 2023)



Journal of Imaging

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.7
Indexed in PubMed



mdpi.com/si/165808

Journal of Imaging
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jimaging@mdpi.com

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About the Journal

Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

Editor-in-Chief

Prof. Dr. Raimondo Schettini

Department of Informatics, Systems and Communication, University of
Milano-Bicocca, viale Sarca, 336, 20126 Milano, Italy

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