Special Issue

Deep Learning-Based Cloud Detection for Remote Sensing Images

Message from the Guest Editor

Satellite images acquired by optical sensors can be affected significantly by the presence of clouds, which can be considered as a source of uncertainty, when the objective is to study the surface, or as the signal, when studying the atmosphere. In any case, automatic detection of clouds becomes mandatory for the operational exploitation of Earth observation satellite images and further retrieval of derived bio-physical products. Deep learning-based algorithms could play a significant role in cloud detection for current and upcoming satellites. Novel deep learning architectures and training procedures are required to better capture the spatial and spectral properties of Earth observation satellite images. Deep learning models excel exploiting the wealth of information contained in labeled datasets, however, the generation of public multi-mission datasets of satellite images for cloud detection is a key requirement that has to be better handled by the remote sensing community. In this context, this Special Issue will review the state of the art in deep learning-based cloud detection algorithms for remote sensing images.

Guest Editor

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peerreview process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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