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Data Science and Machine Learning for Geodetic Earth Observation

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Deadline for manuscript submissions:

closed (28 February 2023)

Message from the Guest Editors

Dear Colleagues,

This Special Issue will address recent progress in the application of methods from data science and machine learning to geodetic Earth observation. Special emphasis will be placed on innovative approaches for harnessing geodetic "big data" for scientific purposes using deep learning. In particular, we encourage investigations related to (but not limited to) improved geodetic parameter prediction (e.g., Earth orientation parameters), detection of spatiotemporal patterns and anomalies (in both images and time series, for example, jump detection), automation of geodetic data processing, and the combination of inhomogeneous observational data and geophysical models (including the exploitation of auxiliary information). Furthermore, we specifically invite contributions that deal with aspects of machine learning sometimes critically seen by geodesists, including challenges related to the quantification of uncertainties, interpretability of results, as well as the integration of physical information. Studies based on more limited data sets from various space geodetic techniques with the goal to solve complex nonlinear problems are welcome as well.











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Editor-in-Chief

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Message from the Editor-in-Chief

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