



Rainfall Estimation Using Signals

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Message from the Guest Editors

Dear Colleagues,

Rainfall is a weather phenomenon that has intensified in recent decades due to climate change. Extreme rainfall is directly related to natural hazards because of flash flood events. Therefore, accurate rainfall measurement in space and time with real-time notification of authorities and competent services regarding extreme events is imperative.

However, accurate rainfall measurement is challenging, especially for extreme precipitation events characterized by high spatial variability. Typical instruments for measuring in situ rainfall are rain gauges and disdrometers, with further information regarding drops. Typical remote rainfall measurements are acquired by weather satellites and radars. Rainfall measurements based on weather radars suffer from several errors coming either from natural or technical sources. Concerning weather satellite measurements, a significant limitation is the indirect character of the retrieval that correlates microphysical and dynamical cloud characteristics with rain amounts at ground level...





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Message from the Editor-in-Chief

Our primary goal is to encourage scientists and engineers to publish their theoretical results and developed methods in as much detail as possible. There is no limit to the maximum length of papers. Whenever possible, authors are encouraged to provide relevant data and developed code so that the results can be reproduced. Our goal is to provide a platform for scientists and engineers to share new approaches to signal processing in various application domains.

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