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Introduction to the thematic issue: Microwave remote sensing

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This special issue of the European Journal of Remote Sensing comprises a selection of papers presented at the customary biannual appointment of the national Ce.Te.M/AIT Workshop on "Microwave Remote Sensing: scientific developments and related technologies". The workshop, which is the 7th of the series, was organized by the Institute of Intelligent Systems for Automation (ISSIA-CNR), the Institute of Applied Physics (IFAC-CNR) and the IEEE GRSS Central and South Italy Chapters, with active support from the Centre for Microwave Remote Sensing (CeTeM) and the Italian Society of Remote Sensing (AIT). The purpose of the workshop has been to provide a forum for the national community to present and discuss periodically current trends in theoretical, experimental and application driven research. The topics included passive and active remote sensing of land, sea and atmosphere.

The 7th CeTeM/AIT workshop was held in Bari, on December 4th and 5th, 2012, and was attended by more than 40 participants. In total, 34 oral papers and a key-note by Dr. Paolo Pampaloni, on 'Microwave remote sensing on snow cover', were presented. In addition, two special sessions on COSMO-SkyMed and new emerging SAR techniques were organized (the program, along with the presentations in pdf format, is available at http://www.cetem.org).

This special issue collects 12 papers, which are grouped into four main categories: 1) hydrology & water quality [Balenzano et al., 2013, Iacobellis et al., 2013; Pierdicca et al., 2013; Vittucci et al., 2013; Adamo et al., 2013]; 2) methods [Refice et al., 2013; Di Martino et al., 2013; Braga et al., 2013; Montuori et al., 2013]; 3) agriculture [Fontanelli et al., 2013; Rinaldi et al., 2013]; 4) meteorology [Marra et al., 2013].

The papers represent updated achievements of research in the field of microwave remote sensing.

We would like to thank the authors for their patience, waiting for the delayed publication of the papers, and their invaluable contribution to the success of the workshop and the publication of this special issue.

A special thank goes to the editors, Davide Travaglini and Gherardo Chirici, for inviting us to select and collect papers in a special issue of this journal. In addition, we are grateful to the reviewers for their valuable contributions.



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