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**Adolfo Comerón
Evgueni I. Kassianov
Klaus Schäfer
Richard H. Picard
Konradin Weber**
Editors

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Introduction

Understanding of the complex atmosphere-surface interactions requires a greater integration across developments in remote sensing sensors, advances in retrieval algorithms, and model improvements. The papers in these proceedings highlight the important role of such integration and provide a wide-ranging overview of the latest discoveries in the connected fields of remote sensing, atmospheric and surface characterization, environmental monitoring, and model enlargement. These discoveries, together with future needs, maintain and ensure a high level of international interest. Active participation of internationally recognized experts and up-and-coming researchers in four oral sessions and one poster session with stimulating discussions and new research ideas is one of the valuable features of the meeting. For example, Professor Volker Wulfmeyer (Univ. Hohenheim, Germany) in his impressive keynote talk discussed both outstanding challenges related to the dynamic land-atmosphere feedback and the significant progress that has been made in synergy of remote sensing and model simulations.

The meeting with strong international representation was held in Berlin, Germany, an attractive city with famous Brandenburg Gate that welcomes visitors from around the world.

We are very grateful to the SPIE staff for the warm welcome and excellent meeting arrangement. The meeting could not have happened without highly appreciated inputs from all participants, followed by high-quality papers which we really appreciated and were delighted to review.

Adolfo Comerón
Evgueni I. Kassianov
Klaus Schäfer
Richard H. Picard
Konradin Weber