

# PROCEEDINGS OF SPIE

## ***Remote Sensing of Clouds and the Atmosphere XVIII; and Optics in Atmospheric Propagation and Adaptive Systems XVI***

**Adolfo Comeron**  
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Editors

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## Introduction

For many years, remote sensing of clouds and atmosphere from surface and space has provided critical information for studying a broad range of physical processes involved in the climate system. The 30 contributions in this volume cover important recent developments in the remote sensing techniques, the impressive technological advances, and the progress of data interpretation. The participants from 12 countries represented a broad variety of remote sensing topics, including the ground and satellite-based remote sensing and comprehensive radiative transfer calculations for improved understanding of the complex physical processes that were involved. In particular, two invited presentations (Prof. Mace, USA and Mr. Bühl, Germany) on the synergy of passive and active remote sensing reviewed the latest achievements, summarized current research efforts and discussed important directions for awe-inspiring improvements. The high-quality presentations and spirited discussions together with the pleasant and friendly environment offered by the SPIE representatives made this SPIE meeting in Dresden, Germany successful and memorable.

**Adolfo Comeron  
Evgeni I. Kassianov  
Klaus Schäfer**