Remote Sensing of Clouds and the Atmosphere XXI

Adolfo Comerón
Evgueni I. Kassianov
Klaus Schäfer
James W. Jack
Richard H. Picard
Konradin Weber
Editors

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**Contents**

<table>
<thead>
<tr>
<th>Session 1</th>
<th>Atmospheric Profiling of Aerosol, Trace Gases, and Meteorological Parameters of Remote Sensing</th>
</tr>
</thead>
<tbody>
<tr>
<td>10001 03</td>
<td>Methane distributions and transports in the nocturnal boundary layer at a rural station [10001-2]</td>
</tr>
<tr>
<td>10001 04</td>
<td>Disposable falling sensors to monitor atmospheric parameters [10001-3]</td>
</tr>
<tr>
<td>10001 06</td>
<td>Remote sensing solutions for when spectrometers no longer are affordable [10001-5]</td>
</tr>
<tr>
<td>10001 07</td>
<td>MACCS-ATCOR Joint Algorithm (MAJA) [10001-6]</td>
</tr>
<tr>
<td>10001 08</td>
<td>Comparison of unfiltered radiances measured in the minor plane by CERES scanners around the time of summer solstices [10001-7]</td>
</tr>
<tr>
<td>10001 09</td>
<td>PICASSO VISION instrument design, engineering model test results, and flight model development status [10001-8]</td>
</tr>
<tr>
<td>10001 0A</td>
<td>Measurements of profiles of aerosol/cloud in the lower atmosphere using a lidar system [10001-9]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2</th>
<th>Radiative Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>10001 0B</td>
<td>Accuracy of RT code SORD for realistic atmospheric profiles [10001-10]</td>
</tr>
<tr>
<td>10001 0D</td>
<td>New Shortwave Array Spectroradiometer-Hemispheric (SAS-He): hyperspectral design and initial applications [10001-12]</td>
</tr>
<tr>
<td>10001 0F</td>
<td>Accurate and efficient correction of adjacency effects for high resolution imagery: comparison to the Lambertian correction for Landsat [10001-14]</td>
</tr>
<tr>
<td>10001 0G</td>
<td>Efficient and accurate atmospheric correction for high-resolution heterogeneous terrain [10001-15]</td>
</tr>
<tr>
<td>10001 0I</td>
<td>Estimation of the adjacency effect with multiple scattering in the simulated signals observed over rugged areas [10001-26]</td>
</tr>
<tr>
<td>Session 3</td>
<td>LIDAR, RADAR, AND PASSIVE ATMOSPHERIC MEASUREMENTS I</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>10001 OK</td>
<td>Statistical study of day and night hourly patterns of columnar aerosol properties using sun and star photometry [10001-18]</td>
</tr>
<tr>
<td>10001 OL</td>
<td>Atmospheric dispersion of airborne pollen evidenced by near-surface and columnar measurements in Barcelona, Spain [10001-19]</td>
</tr>
<tr>
<td>10001 OM</td>
<td>Assimilation of microwave, infrared, and radio occultation satellite observations with a WRF model for heavy rainfall forecasting [10001-20]</td>
</tr>
<tr>
<td>10001 ON</td>
<td>Analysis of the atmospheric upward radiation in low latitude area [10001-25]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 4</th>
<th>LIDAR, RADAR, AND PASSIVE ATMOSPHERIC MEASUREMENTS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>10001 OP</td>
<td>A low-cost digital holographic imager for calibration and validation of cloud microphysics remote sensing (Best Student Paper) [10001-22]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poster Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10001 OT</td>
</tr>
<tr>
<td>10001 OU</td>
</tr>
<tr>
<td>10001 OW</td>
</tr>
<tr>
<td>10001 OY</td>
</tr>
<tr>
<td>10001 OZ</td>
</tr>
<tr>
<td>10001 10</td>
</tr>
<tr>
<td>10001 11</td>
</tr>
<tr>
<td>10001 12</td>
</tr>
<tr>
<td>10001 13</td>
</tr>
</tbody>
</table>
Authors

Numbers in the index correspond to the last two digits of the six-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first four digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Akujärvi, Altti, 09
Alados-Arboledas, L., 0K
Alarcón, Marta, 0L
Allegritti, M., 04
Arnoldt, Alexander, 0T
Auer, Stefan, 07
Baek, Jongho, 12
Baldaşano, José Maria, 0L
Bao, Yunfei, 0I
Baranovskiy, Nikolay V., 0Y, 13
Barnard, James, 0D
Belikova, Marina Yu., 13
Belmonte, Jordina, 0L
Berg, Larry, 0D
Bertoldo, S., 04
Boonyuen, Pakornpop, 0M
Borovoi, Anatoly G., 0Z
Brosy, Caroline, 03
Bryukhanov, Ilia D., 0Z
Bryukhanova, V. V., 0W
Chambers, Thomas E., 0P
Choi, Sungwon, 10
Chong, JiHyo, 12
Comerón, Adolfo, 0L
Dejus, Michel, 07
De Linares, Concepción, 0L
Demoulin, Philippe, 09
Desjardins, Camille, 07
Doroshkevich, A. A., 0W
Emeis, Stefan, 03
Ernold, Brian, 0D
Fersch, Benjamin, 03
Flynn, Connor, 0D
Fussen, Didier, 09
Gao, Long, 0I
Gasmi, Khaled, 0A
Hagolle, Olivier, 07
Hamilton, Murray W., 0P
Han, Kyung-Soo, 10, 11
Holben, Brent, 08
Holmtund, Christer, 08
Izquierdo, Rebeca, 0L
Jiang, Cheng, 0I
Jin, Donghyun, 10
Joba, Oriol, 0L
Kassianov, Evgeni, 0D
Kim, Young J., 12
Kocheeva, Nina A., 13
Konoshonkin, Alexander V., 0W, 0Z
Korkin, Sergey, 0B
Krechetova, Svetlana Yu., 13
Kustova, Natalia V., 0Z
Kwon, Chaeyoung, 11
Lee, Darae, 10, 11
Lee, Hanlim, 12
Lee, Kyeong-Sang, 10, 11
Li, Fangqi, 0I
Li, Haiying, ON
Lu, Changsheng, ON
Lucanian, C., 04
Lyamani, H., 0K
Lyapustin, Alexei, 0B
Makarau, Aliaksei, 07
Manger, Daniel, 0T
Mannila, Rami, 09
Mauder, Matthias, 03
Münkel, Christoph, 03
Näkki, Ismo, 09
ña, Antti, 09
Nasonov, Sergey V., 0Z
Nee, E. V., 0W
O’Neill, N. T., 0K
Ojanen, Harri J., 09
Olmo, F. J., 0K
Pagel, Frank, 0T
Pérez-Ramirez, D., 0K
Perona, G., 04
Petrucci, Beatrice, 07
Phunthirawuth, Parwopath, 0M
Pieroux, Didier, 09
Pietruchczuk, Aleksander, 0U
Priestley, Kory J., 0B
Reid, Iain M., 0P
Saari, Heikki, 09
Schäfer, Klaus, 03
Sei, Alain, 0F, 0G
Schild, Mark, 11
Shishko, Viktor A., 0Z
Sicard, Michaël, 0L
Sinyuk, Aliaksandr, 08
Smirnov, A., 0K
Smith, G. Louis, 08
Szewczyk, Z. Peter, 08
Szkop, Artur, 0U
Timofeev, Dmitriy N., 0Z
Tremas, Thierry, 07
van Brug, Hedser, 06
Veselovskii, I., 0K
Visser, Huib, 06
Warweg, Oliver, 0T
Whiteman, D. N., 0K
Wu, Falin, 0M
Wu, Zhensen, 0N
Xing, Kun, 0I
Yankovich, Elena P., 13
Zeeman, Matthias, 03
Zhao, Yan, 0M
Zharikova, M. V., 0Y
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1 Atmospheric Profiling of Aerosol, Trace Gases, and Meteorological Parameters of Remote Sensing
Adolfo Comerón, Universitat Politècnica de Catalunya (Spain)

2 Radiative Transfer
Evgueni I. Kassianov, Pacific Northwest National Laboratory (United States)
Introduction

Remote sensing of clouds and atmosphere from ground, air, and space are central to many climate-related and air quality studies with important and far-reaching societal applications. This volume provides an opportunity for readers to review contributions on new advances in a wide variety of topics related to both passive and active remote sensing. The diversity of participants from Europe, North America, Asia, and Australia reflects the international recognition of the need to design modern instrumentation, as well as to advance retrieval techniques, models, and user friendliness. A strong interrelation with the newly created conference “Remote Sensing Technologies and Applications in Urban Environments” exists, where more specific and object-oriented remote sensing results are presented and discussed.

A healthy mixture of senior investigators and talented young researchers is one of the valuable signatures of this conference. In particular, a distinguished keynote speaker (Dr. Ewan O’Connor, Finnish Meteorological Institute, Finland, and University of Reading, UK) offered an interesting lecture on the current state of ground-based active remote sensing of clouds and aerosols, fast-paced advances in data interpretation, and future directions for addressing long-standing challenges. The Best Student Paper Award (Mr. Thomas Chambers, University of Adelaide, Australia) was recognized thanks to the special financial support from the SPIE Organizing Committee.

The meeting was held in Edinburgh, UK, an attractive city with a long and impressive tradition of scientific and cultural life. We would like to express our most sincere thanks to the SPIE Organizing Committee for creating a pleasant atmosphere and to all the participants for making this conference successful. Also, we would like to acknowledge our colleagues from the University of Edinburgh, UK, and especially Dr. James Jack for hosting this conference and for invaluable support during this international forum.

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