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ISPRS WORKSHOP
**LAND SURFACE MAPPING AND CHARACTERIZATION
USING LASER ALTIMETRY**
22ND TO 24TH OCTOBER 2001
ANNAPOLIS, MARYLAND

Editor
Michelle A. Hofton

ORGANIZED AND SPONSORED BY
ISPRS WG III/3: 3D Reconstruction from airborne laser scanner and InSAR data
ISPRS WG III/6: Multi-source vision
The Vegetation Canopy Lidar (VCL) Project, University of Maryland, College Park, USA
Airborne 1 Corporation, Los Angeles, CA, USA
The Ohio State University, Columbus, OH, USA
NASA Goddard Space Flight Center, Greenbelt, MD, USA

Workshop Organization

The workshop was hosted by the following Working Groups and Organizations:

ISPRS WG III/3 **3D Reconstruction from airborne laser scanner and InSAR data**

Chairs: G. Vosselman, Delft University of Technology, Delft, The Netherlands
H.-G. Maas, Dresden University of Technology, Dresden, Germany

ISPRS WG III/6 **Multi-source vision**

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Preface

Laser altimetry is rapidly establishing itself as a useful technique for many mapping, surface characterization and 3D reconstruction purposes. With successful flights of the Shuttle Laser Altimeter (SLA), planned launches of multi-year missions such as NASA's Vegetation Canopy Lidar (VCL) and Ice, Cloud and land Elevation Satellite (ICESat), as well as numerous commercial and research airborne activities, extensive observations are increasingly available. The objective of the workshop **Land Surface Mapping and Characterization Using Laser Altimetry** was to bring together an interdisciplinary group of scientists, engineers, and end users working in the field of laser remote sensing of the solid earth, oceans, and other planets, to exchange scientific research and technology development involving laser remote sensing. In addition to formal presentations, open forum discussions were held to facilitate the exchange of experience and to identify problems and potential solutions.

The three-day event brought together ~80 participants from various backgrounds, expertise and affiliations. Forty-five papers were presented covering theoretical and conceptual topics and applications. Invited contributions highlighted the diversity of applications of laser altimetry systems and data. Nearly all presentations are contained in this volume, organized in the sequence of the workshop sessions.

The workshop was held at the "Historic Inns of Annapolis", three restored inns in the center of Annapolis, Maryland, USA. The workshop was hosted by the **International Society for Photogrammetry and Remote Sensing (ISPRS)**, the **University of Maryland**, the **Ohio State University**, and **NASA Goddard Space Flight Center**. Financial support was provided by **Airborne 1 Corporation** and the **Vegetation Canopy Lidar (VCL)** mission.

This workshop is the second ISPRS workshop dedicated to the theory and applications of laser altimetry. The last workshop, which was held in November of 1999 in La Jolla, California, brought together ~70 researchers from several countries to discuss a broad spectrum of lidar topics, and we look forward to continuing this series in the near future.

I would like to thank all the authors for their very valuable contributions, and everyone who contributed to the success of the workshop.

Michelle A. Hofton

Editor

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