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Preface

These are the proceedings of the ISPRS Technical Commission VII Symposium that was held on July 5–7, 2010, at the Vienna University of Technology, Austria. The proceedings consist of two parts: Part A collects all papers that were accepted on the basis of peer-reviewed full manuscripts; Part B contains papers which have been selected based on a review of the submitted abstracts.

The topic of the symposium was "100 Years ISPRS – Advancing Remote Sensing Science" to celebrate the foundation of the International Society for Photogrammetry (ISP) on July 4, 1910, on the initiative by Prof. Eduard Doležal. The Society changed its name to the International Society for Photogrammetry and Remote Sensing (ISPRS) in 1980, reflecting the increasing integration of the two disciplines. In our modern digital age, photogrammetry and remote sensing have virtually grown together, having as their common scope the extraction of reliable information from non-contact imaging and other sensor systems about the Earth and its environment through recording, measuring, analysing and representation.

Given the particular occasion the themes of the symposium extended beyond the traditional realms of Commission VII ("Thematic Processing, Modelling and Analysis of Remotely Sensed Data") by inviting contributions from the other ISPRS Commissions as well. Contributions that provided a comprehensive overview of the major research areas in remote sensing, highlighting past achievements and identifying challenges for the future, were particularly welcome. The conference topics were

- Multi-spectral and hyperspectral remote sensing
- Microwave remote sensing
- Lidar and laser scanning
- Geometric modelling
- Physical modelling and signatures
- Change detection and process modelling
- Land cover classification
- Image processing and pattern recognition
- Data fusion and data assimilation
- Earth observation programmes
- Remote sensing applications
- Operational remote sensing applications

We would like to take this opportunity here to sincerely thank the reviewers of both the full-papers and the abstracts for their valuable time and expertise! Each paper within Part A was reviewed by at least two reviewers and revised according to their comments. Only 60% of the submitted full papers finally made it through this review process. Also each abstract was reviewed by two peers, most of them by even three of more peers. Without question, the reviewer's effort was not in vain as it has helped to raise the quality of the papers and has allowed us to put together a high-quality technical programme.

Nevertheless, we also would like to add some self-criticism here. Within ISPRS the importance of a proper review process is broadly recognised. Also, more and more ISPRS colleagues rightfully request that all papers published in the *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* (such as those contained in the current volume) shall be covered by prominent indexing and abstracting databases. Yet, there is no standard ISPRS reviewing system, nor is there a professional editorial support and indexing service. Consequently, every organiser of an ISPRS workshop, symposium or congress needs to reinvent the wheel by building up his/her own system for reviewing and handling the scientific contributions and for producing the proceedings. Having never organised an event with more

than hundred people, the learning curve has been particularly steep for us. As a result, mistakes were unavoidable and we would like to apologise with the authors and reviewers for any inconvenience that they may have experienced. We are confident that together we will be able to solve this challenge for future scientific meetings to the benefit of our discipline.

Finally, we want to highlight the very positive fact that we have received many excellent papers from scientists from developing regions. This suggests to us that ISPRS has been quite successful in stimulating the exchange of scientists from around the world and diverse cultural background. This will become the ever more important as climate change, continued population growth and shrinking natural resources have all become truly global problems that require, as one small part of the solution, global observation capabilities to better understand of how we have to act locally.

Vienna, June 2010

Wolfgang Wagner

Balázs Székely

Symposium Committee

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