The Adria Microplate: GPS Geodesy, Tectonics and Hazards
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The Adria Microplate: GPS Geodesy, Tectonics and Hazards

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Preface

Since its first application to geodynamical problems, GPS geodesy has gradually revealed the nature of motion and deformation for most active areas of deformation across the Earth. One of the last remaining regional-scale problems is the motion and associated deformation in the peri-Adriatic region. Selected local-scale studies have examined aspects of this motion, but to date no regional team has systematically attacked the full regional scope of this problem. This NATO Advanced Research Workshop (ARW) was designed to bring together an international group of scientists working in the peri-Adriatic region to: (1) review research activities and results completed to date, (2) share technical expertise, and (3) provide a springboard for future collaborative research on Adria geodynamics.

This NATO ARW was held from April 4-7, 2004 in Veszprém, Hungary. The meeting venue was the Veszprém center of the Hungarian Academy of Sciences (VEAB), located on the ramparts of the city’s castle district. Workshop participants included 32 participants from 15 different countries. Most participants arrived in Budapest on April 3, staying at the Hotel Peregrinus, just off the Vaci Utca pedestrian zone in central Pest (access to the Peregrinus courtesy of the Geophysics Department, Eötvös Loránd Technical University). This unofficial “staging” day facilitated assembly of participants from different locations, allowed opportunity to explore the historic center of Budapest, and allowed overseas participants to recover from their jet-lag. Early on the morning of April 4, additional participants arrived at the Peregrinus to join the group on the chartered bus trip to Veszprém. With Budapest traffic (uncharacteristically) light on a Sunday morning, the bus delivered the group to Veszprém. Additional workshop participants also arrived independently in Veszprém during the morning of April 4. Formal activities of the ARW began with lunch on April 4 and continued through dinner on April 6. After a formal welcome and convocation speech on the first day, four half-day plenary sessions were held, each consisting of 7-9 presentations. Themes of each of these sessions were: (1) Regional Tectonics of South-Central Europe, (2) Geologic Evidence and Recent Research on Adria Motion, (3) Geodetic Infrastructure and Research in the Peri-Adriatic Region, and (4) Adria Plate Motion and Societal Impacts. A particularly popular element of the workshop took place during the fifth half-day session. This summative review consisted of four “break-out” sessions, reports of break-out session chairs, a panel discussion, and a final summative review or the workshop and future milestones. Areas of agreement were identified, as well as remaining areas of debate. In addition, attention focused on important scientific questions and the potential for international and interdisciplinary research in the future.
The Adria Microplate

Records of the workshop included a volume of extended abstracts that was distributed at the time of the meeting as well as a compilation of Powerpoint presentations. Regarding the latter, we solicited all participants whether they would be willing to share their Powerpoint presentations with the group as a while; we then produced a CD that was distributed to all workshop participants who contributed their presentations. The final record of the workshop is this volume. A total of 26 papers were contributed, and each one was peer reviewed by at least two reviewers, one of the Associate Editors, as well as both of the two lead editors. We thank all of the authors and all of the reviewers for their tremendous efforts, and we believe that those efforts are reflected here in an outstanding and timely contribution to the science of geodesy, tectonics, and the understanding of the peri-Adriatic region.

Finally, the editors would like to thank the NATO Science Commission for its support for the Veszprém workshop and for this volume, the Geophysics Department of Eötvös Loránd University for its co-sponsorship and logistical support of the meeting, and the Hungarian Academy of Science for the use of its meeting, lodging, and dining facilities in Veszprém. Special thanks are due to our Workshop Coordinator, Dr. Sandor Frey of the Satellite Geodetic Observatory. Dr. Frey's tremendous efforts in advance of and during the meeting were critical to its successful outcome. We would also like to thank Mr. Endre Dömbradi and Ms. Anita Horváth for their capable and good-natured assistance during the running of the workshop.

The editors