

# 11<sup>th</sup> ICA Mountain Cartography Workshop

## Mapping for Outdoor Activities in Mountains

Hvar, Croatia, 21-25 May 2018

The 11<sup>th</sup> ICA Mountain Cartography Workshop organised by Commission on Mountain Cartography (CMC) was held from May 21-25, 2018 in Hvar (island and city), Croatia. Workshops are held every second year, alternating with the International Cartographic Conferences (ICC). This year the workshop venue did not follow the tradition of visiting high mountains. Instead, we met on a rugged island off the Dalmatian Coast. What 628 m Sveti Nikola, the highest peak on Hvar, lacks in altitude is compensated for with its cliffs, maritime setting, history, and human interaction with the natural environment. Dražen Tutić, Matjaž Štanfel and Ana Kuveždić Divjak from Faculty of Geodesy, University of Zagreb, together with Milo Tadic from Event&Travel Service, Stuttgart, Germany were main organizers of the workshop. Dušan Petrovič, CMC chair, and Tom Patterson, CMC vice-chair, supported organizers in preparation of the workshop.

Workshop goals are to further define the topics of mountain cartography, to promote the methods and knowledge of mountain cartography and to demonstrate and discuss state of the art issues on practical and theoretical mountain cartography. The overall theme of this year's workshop was "Mapping for Outdoor Activities in Mountains" with the idea to address local issues in the field of mountain cartography. Two days of the workshop featured 35 presentations divided into nine sessions with following topics: Mapping Mountains, Automation, Recreation, Caves, Volcanoes, Islands, and Oceans, Relief Presentation, Glaciers, Mountain Safety, Education, and Visualization. The workshop was attended by 44 participants from the USA, Canada, New Zealand, Russia, Austria, Switzerland, Romania, Norway, U.K., Germany, Philippines, Slovenia, and Croatia.

Four participants—Maša Arnež (Slovenia), Lukas Neugebauer and Benedikt Hajek (Austria), and Tomislav Jogun (Croatia)—were able to attend thanks to ICA Young Mountain Cartographer Awards. Thanks to this award, these gifted young scientists were able to present their work at the workshop.

The Workshop began on Monday evening with welcoming remarks from the local organizer, Dražen Tutić and the commission chair, Dušan Petrovič. The program continued with a welcome dinner. The next two days were reserved for presentations. Each day started with a keynote presentation, first by Alex Tait from National Geographic Society with a talk titled "Mount Everest: What is left to Map?" and second by Tom Patterson from U.S. National Park Service with a talk titled "Designing 3D Terrain Maps". On Wednesday, the Commission had a meeting where Dušan Petrovič delivered current agenda and issues of CMC.

On Tuesday evening participants enjoyed a mountain trivia contest prepared by Tom Patterson. Thursday was a day for outdoor activities. In the first part, participants had an option for hiking to Sveti Nikola peak, or to walk to nearby Hvar Observatory where astronomer, Jaša Čalogović from Faculty of Geodesy gave a presentation of observations of the Sun that are conducted on this observatory. In the afternoon, the boat tour around Pakleni Islands offered swimming opportunity, views of the city of Hvar from seaside as well as the famous beaches which attract many tourists. The day concluded with a gala dinner. Friday was a final day for most of the participants, and after a wrap up and closing session, they departed Hvar. For those who stayed on the island, organization team prepared hiking tour from Velo Grablje to Milna and back to Hvar, and for the evening a wine tasting in village Vrboska.

More information on the workshop can be found on CMC website.

Dušan Petrovič, Tom Patterson, Dražen Tutić