Preface

During the last few decades, we have seen disasters not only stem from natural and technological sources but human activities have affected societies with increasing frequency and global change as well. This resulted in enormous socioeconomic losses and damaged the lives in both developing and developed countries.

State-of-the-art technologies have implemented designing various tools and applications for saving the earth with informed solutions. Geo-informatics technologies and earth observation satellites have already demonstrated a strong flexibility in providing data, analyzing data, and modeling for a broad range of applications. The Geo-informatics for Natural Disaster Management (GiT4NDM) and Earth Observation Global Changes (EOGC) events have been struggling in establishing a platform for scientists, researchers, practitioners, etc. The goal was to make a sustainable development by organizing events around the world. This began from 2007, and it is still ongoing (www.widm.ca). Thus, the GiT4NDM events known for their "Informed Solution and Diversity" concern not only earth observation systems but also hazards and disasters. The concerns are in global environmental water issues, climate changes, hazards, disaster management, geospatial analysis and modeling, digital image processing, mapping, and management of natural resources, which have also been complex tasks.

State-of-the-art technologies' sectors can represent a significant portion of the socioeconomy of every industrialized nation in the world. Thus, this indicated how technologies are important for every country. However, technology has also become ubiquitous in modern society and nowadays we talk about "High Technology." Many technologies have been showing tremendous promise since the beginning of the twenty-first century. These include earth observation systems, laser scanning systems, Internet advancements, computer devices, and software advancements related to hazards, disaster management, energy, and the environment. The GiT4NDM motivates researchers to explore and find the intersection of these technologies that may indeed enable the most promising opportunities.

In this context, the editors of this volume had a long-time paper selection process extracted from 169 papers submitted to the 7th GiT4NDM-5th EOGC 2015 (December 8–10, 2015, UAE University, UAE). After the peer-reviewing process

by the editors and assistant editors, the authors of a total of 51 full papers were invited to submit the revised version of the manuscripts. However, in total 16 revised version manuscripts were again evaluated for publication in the current volume.

This book contains six parts: (1) Land Use and Land Cover Change, (2) Agriculture Monitoring, (3) Smart City, (4) Climate Change, (5) Risk Assessment, (6) Disaster Management.

Visiting Al-Ain schools' students to the 7th GiT4NDM-5th EOGC 2015 during the conference

Exhibition at the 7th GiT4NDM-5th EOGC 2015

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