

Contents

Part I Land Use and Land Cover Change

Examining the Effect of Land Use on the Spatiotemporal Dynamics of Urban Temperature in an Industrial City: A Landsat Imagery Analysis	3
Yusuf A. Aina, Irshad M. Parvez and Abdul-Lateef Balogun	
The Study of Multi-temporal Analysis of Urban Development and Environmental Changes of the City of Abu Dhabi	17
H. Hussein and M. Hussein	
CRF-Based Simultaneous Segmentation and Classification of High-Resolution Satellite Images	33
Weihong Cui, Guofeng Wang, Chenyi Feng, Yiwei Zheng and Jonathan Li	
The Dynamic of Dike-Pond System in the Pearl River Delta During 1964–2012	47
Yuenan Li, Kai Liu, Yang Liu and Yuanhui Zhu	

Part II Agriculture Monitoring

Effects of Irrigation and Nitrogen on Maize Growth and Yield Components	63
Xiukang Wang and Yingying Xing	
A Review of the Effects of Drought on the Grain Yield in the Vays, Mollasani, and Salamat Regions of the Khuzestan Province	75
Peyman Molaali and Omosalameh Babae	

Part III Smart City

Communicating Disaster Risk Reduction Through Web-Map Applications	91
Ali Asgary and Daryoush Kari	

Mapping Sand Dune Fields in Abu Dhabi Emirate Over the Period of 1992–2013 Using Landsat Data	101
N. Saleous, S. Issa and R. Saeed	
Spatiotemporal Analysis and Image Registration for Studying Growth of Transportation Infrastructure in Sharjah City, UAE	113
Rami Al-Ruzouq, Khaled Hamad and Abdallah Shanableh	
Part IV Climate Change	
Assessment of the Potential Impacts of Sea Level Rise on the Coastal Plain of Al Batinah, Sultanate of Oman.	125
Salim Mubarak Al Hatrush	
Climate Change and Insecurity: An Examination of Gombe State's Predicament in the Northeastern Nigeria.	131
U.A. Abubakar and A. Ahmed	
Climate Change and Forced Migration from Ngala and Kala-Balge LGAs, N.E. Borno State, Nigeria	141
Adam M. Abbas	
Part V Risk Assessment	
Detection of Areas Associated with Flash Floods and Erosion Caused by Rainfall Storm Using Topographic Attributes, Hydrologic Indices, and GIS	155
A. Bannari, A. Ghadeer, A. El-Battay, N.A. Hameed and M. Rouai	
Collapse Assessment of Substandard Concrete Structures for Seismic Loss Estimation of the Building Inventory in the UAE	175
Aman Mwafy and Bashir Almurad	
Part VI Disaster Management	
Status of Spatial Analysis for Urban Emergency Management	191
Rifaat Abdalla	
Experimental Study of the Mechanics of Gypsum Seam Hazard for Abu Dhabi	211
M. Opolot, W. Li, R.L. Sousa and A.L. Costa	
Index	227

Global Changes and Natural Disaster Management:

Geo-information Technologies

Pirasteh, S.; Li, J. (Eds.)

2017, XV, 228 p. 94 illus., 79 illus. in color., Hardcover

ISBN: 978-3-319-51843-5