



Volume 19, October 2012

ISSN 0303-2434

International Journal of

APPLIED EARTH OBSERVATION AND GEOINFORMATION



Editor-in-Chief
F. D. van der Meer, The Netherlands

CONTENTS

Estimating net radiation flux in the Tibetan Plateau by assimilating MODIS LST products with an ensemble Kalman filter and particle filter Z. Li, L. Zhao and Z. Fu (Beijing, China).....	1
Estimating regional heavy metal concentrations in rice by scaling up a field-scale heavy metal assessment model M. Liu, X. Liu (Beijing, China), J. Li (Fujian, China and Waterloo, Canada) and T. Li (Beijing, China).....	12
Development of a spatial data infrastructure for coastal management in the Amirante Islands, Seychelles S.M. Hamylton (Cambridge, Australia and Australia) and J. Prosper (Seychelles).....	24
Spectral responses to plant available soil moisture in a Californian grassland S. Liu (TN, USA and Santa Barbara, USA), D.A. Roberts, O.A. Chadwick and C.J. Still (Santa Barbara, USA).....	31
Elevation changes of Alamkough glacier in Iran since 1955, based on remote sensing data N. Karimi (Tehran, Iran), A. Farokhnia (Tehran, Iran and Kerman, Iran), S. Shishangosht, M. Elmi, M. Eftekhari and H. Ghalkhani (Tehran, Iran)...	45
Calibrating CORINE Land Cover 2000 on forest inventories and climatic data: An example for Italy R. Pili (Via Fermi, Italy).....	59
A methodology to generate a synergetic land-cover map by fusion of different land-cover products A. Pérez-Hoyos, F.J. García-Haro (Valencia, Spain) and J. San-Miguel-Ayanz (Ispira, Italy).....	72
Applying vegetation indices to detect high water table zones in humid warm-temperate regions using satellite remote sensing K. Koide (Mizunami, Japan) and K. Koike (Kyoto, Japan).....	88
Design and implementation of an algorithm for automatic 3D reconstruction of building models using genetic algorithm M. Kabolizade, H. Ebadi and A. Mohammadzadeh (Tehran, Iran).....	104
Comparison of regression and kriging techniques for mapping the average annual precipitation of Turkey P.A. Bostan (Ankara, Turkey), G.B.M. Heuvelink (Wageningen, The Netherlands) and S.Z. Akyurek (Ankara, Turkey).....	115
Monitoring patterns of urban heat islands of the fast-growing Shanghai metropolis, China: Using time-series of Landsat TM/ETM+ data Y.-y. Li, H. Zhang (Shanghai, China) and W. Kainz (Vienna, Austria).....	127
Polarimetric classification of Boreal forest using nonparametric feature selection and multiple classifiers Y. Maghsoudi, M. Collins (Calgary, Canada) and D.G. Leckie (Canada).....	139
Regional estimation of savanna grass nitrogen using the red-edge band of the spaceborne RapidEye sensor A. Ramoelo (Pretoria, South Africa and Enschede, The Netherlands), A.K. Skidmore (Enschede, The Netherlands), M.A. Cho (Pretoria, South Africa), M. Schlerf (Belvaux, Luxembourg), R. Mathieu (Pretoria, South Africa) and I.M.A. Heitkönig (Wageningen, The Netherlands).....	151
Evaluation of the DisTrad thermal sharpening methodology for urban areas W. Essa, B. Verbeiren (Brussels, Belgium), J. van der Kwast (Mol, Belgium), T. Van de Voorde (Brussels, Belgium) and O. Batelaan (Brussels, Belgium and Heverlee, Belgium).....	163
Random Forests as a tool for estimating uncertainty at pixel-level in SAR image classification L. Loosvelt, J. Peters (Belgium), H. Skriver (Lyngby, Denmark), H. Lievens, F.M.B. Van Coillie, B. De Baets and N.E.C. Verhoest (Belgium).....	173
Mapping invasive <i>Fallopia japonica</i> by combined spectral, spatial, and temporal analysis of digital orthophotos W. Dorigo (Vienna, Austria), A. Lucieer (Tasmania, Australia), T. Podobnikar (Vienna, Austria and Ljubljana, Slovenia) and A. Čarni (Ljubljana, Slovenia).....	185
Estimation of grassland biomass and nitrogen using MERIS data S. Ullah (Enschede, The Netherlands), Y. Si (Beijing, China), M. Schlerf (Belvaux, Luxembourg), A.K. Skidmore (Enschede, The Netherlands), M. Shafique (Pakistan) and I.A. Iqbal (Karachi, Pakistan).....	196
Change detection approaches for flood extent mapping: How to select the most adequate reference image from online archives? R. Hostache, P. Matgen (Belvaux, Luxembourg) and W. Wagner (Vienna, Austria).....	205
Spatial and thematic assessment of object-based forest stand delineation using an OFA-matrix A. Hernando (Madrid, Spain), D. Tiede, F. Albrecht and S. Lang (Salzburg, Austria).....	214
Spatial variability of terrestrial laser scanning based leaf area index G. Zheng (Nanjing, China) and L.M. Moskal (Seattle, WA, USA).....	226

(Contents continued on Page i)

Available online at www.sciencedirect.com

SciVerse ScienceDirect

Important Note to Authors

Please note change in address for the Editorial Office: Editorial Office, International Journal of Applied Earth Observation and Geoinformation, P.O. Box 6, 7500 AA Enschede, The Netherlands

