

IEEE

GEOSCIENCE AND REMOTE SENSING LETTERS

A PUBLICATION OF THE IEEE GEOSCIENCE AND REMOTE SENSING SOCIETY



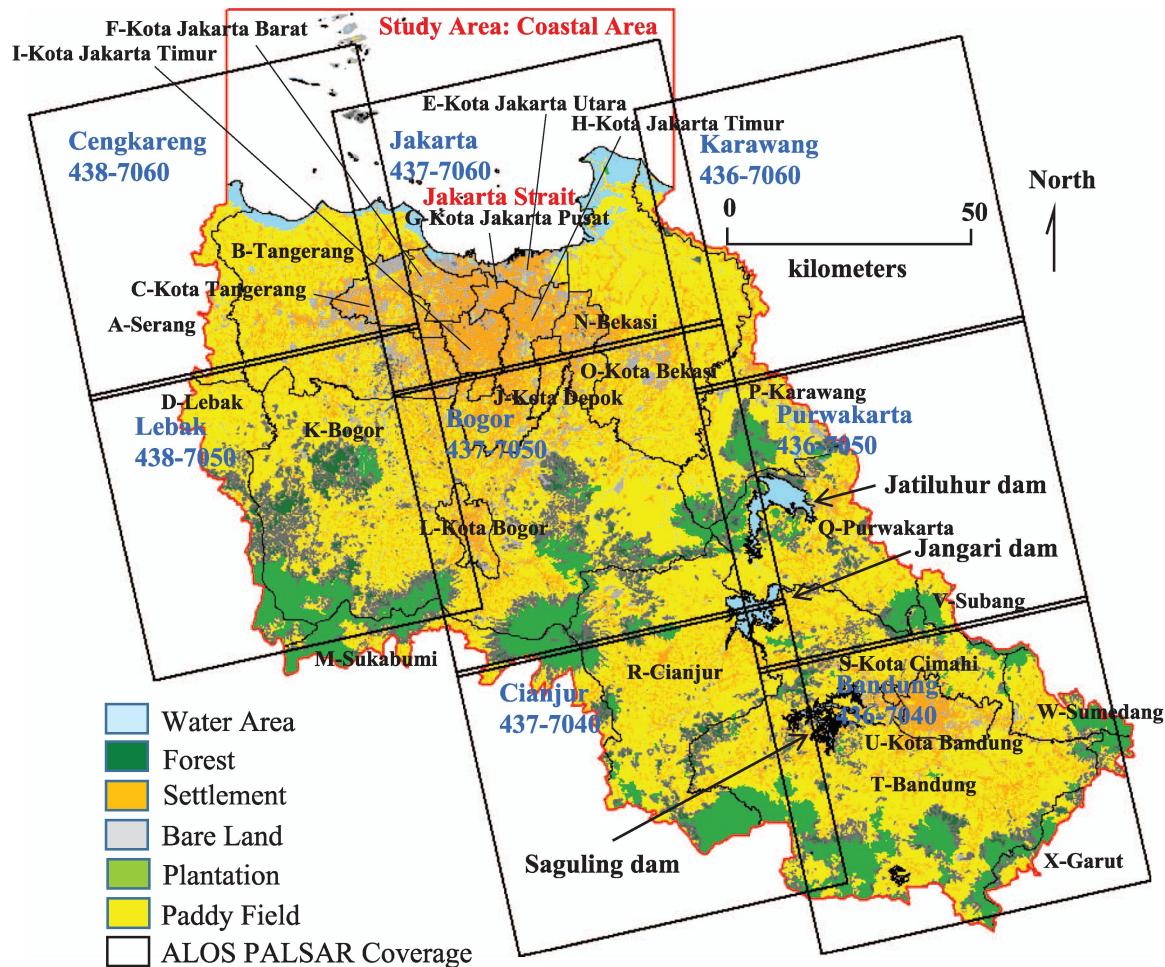
OCTOBER 2016

VOLUME 13

NUMBER 10

IGRSBY

(ISSN 1545-598X)



Monitoring of landuse change and land deformation using persistent scatterer interferometry of ALOS PALSAR at West Java Mega Urban Region, Indonesia that affects the sedimentation velocity of outlets along Jakarta coastal area.

IEEE

GEOSCIENCE AND REMOTE SENSING LETTERS

A PUBLICATION OF THE IEEE GEOSCIENCE AND REMOTE SENSING SOCIETY



OCTOBER 2016

VOLUME 13

NUMBER 10

IGRSBY

(ISSN 1545-598X)

PAPERS

Atmosphere

- A Theoretical Study of a Vector Radiative Transfer Equation for Atmosphere and Ocean Medium *H. Zheng* 1430
Recent Advances in Numerical Simulation of Propagation of EM Waves in the Earth's Ionosphere
A. S. Sokolov, D. S. Lukin, and V. G. Harris 1433

- Technique for Determination of Particulate Matter Pollution in the Atmosphere Using Waveguide Slot Linear Array
Antennas: A Feasibility Study *A. Á. Salas-Sánchez, M. E. López-Martín, J. A. Rodríguez-González, and F. J. Ares-Pena* 1502

Oceans and Water

- Validation of HF Radar-Derived Currents in the Gulf of Naples With Lagrangian Data
A. Kalampokis, M. Uttieri, P.-M. Poulain, and E. Zambianchi 1452
Investigation on the Tendencies of the Land–Ocean Warming Contrast in the Recent Decades
L. Zhao, J. Xu, A. Powell, D. Guo, C. Shi, M. Shao, and D. Wang 1522
Multifractal Detrended Fluctuation Analysis to Compare Coral Bank and Seafloor Seepage Area-Related
Characterization Along the Central Western Continental Margin of India
B. Chakraborty, Y. V. Vardhan, K. Haris, A. Menezes, S. M. Karisiddaiah, W. A. Fernandes, and J. Kurian 1542

Cryosphere

- Polar Lows Over the Eastern Part of the Eurasian Arctic: The Sea-Ice Retreat Consequence
E. V. Zabolotskikh, I. A. Gurvich, and B. Chapron 1492

Surface and Subsurface Properties

- Accurate Fracture Scattering Simulation by Thin Dielectric Sheet-Based Surface Integral Equation
Y. Ren, W.-F. Huang, Q. H. Liu, Y. P. Chen, and H.-S. Zhang 1448
One-Step Slope Estimation for Dealiasing Seismic Data Reconstruction via Iterative Seislet Thresholding
W. Liu, S. Cao, S. Gan, Y. Chen, S. Zu, and Z. Jin 1462

Image Processing, Analysis, and Classification

- Remote Sensing Image Transfer Classification Based on Weighted Extreme Learning Machine
Y. Zhou, J. Lian, and M. Han 1405
Intercalibration of DMSP/OLS by Parallel Regressions D. Stathakis 1420
The Earth-Observation Epitome: A New Interactive Value-Added Product D. Espinoza-Molina and M. Datcu 1438

(Contents Continued on Page 1394)

Human Target Localization Using Hough Transform and Doppler Processing	Y. Ding, X. Lin, K. Sun, X. Xu, and X. Liu	1457
Distributed Greedy Signal Recovery for Through-the-Wall Radar Imaging	M. Stiefel, M. Leigsnering, A. M. Zoubir, F. Ahmad, and M. G. Amin	1477
Subpixel Mapping of Multispectral Images Using Markov Random Field With Graph Cut Optimization	Q. Liu and J. Trinder	1507
Nonlocal Low-Rank-Based Compressed Sensing for Remote Sensing Image Reconstruction	J. Wei, Y. Huang, K. Lu, and L. Wang	1557
Hyperspectral Data Processing		
Local Collaborative Representation With Adaptive Dictionary Selection for Hyperspectral Image Classification	Y. Zheng, L. Jiao, R. Shang, B. Hou, and X. Zhang	1482
Dimensionality Reduction Based on Group-Based Tensor Model for Hyperspectral Image Classification	J. An, X. Zhang, and L. C. Jiao	1497
Multilayer Unmixing for Hyperspectral Imagery With Fast Kernel Archetypal Analysis	G. Zhao, C. Zhao, and X. Jia	1532
A Self-Improving Convolution Neural Network for the Classification of Hyperspectral Data	P. Ghamisi, Y. Chen, and X. X. Zhu	1537
Spectral–Spatial Classification of Hyperspectral Images Using Probabilistic Weighted Strategy for Multifeature Fusion	Z. Chunsen, Z. Yiwei, and F. Chenyi	1562
Radar Systems		
Phase Altimetry Using Reflected Signals From BeiDou GEO Satellites	Z. Yun, L. Binbin, T. Luman, G. Qiming, H. Yanling, and H. Zhonghua	1410
Airborne Demonstration of DPCA for Velocity Measurements of Distributed Targets	S. Tanelli, S. L. Durden, and M. P. Johnson	1415
Microwave Radiometry		
Disaggregation of Low-Resolution L-Band Radiometry Using C-Band Radar Data	C. Rüdiger, C.-H. Su, D. Ryu, and W. Wagner	1425
Rotation Feature Extraction for Moving Targets Based on Temporal Differencing and Image Edge Detection	Z. Li, G. Zhao, S. Li, H. Sun, R. Tao, X. Huang, and Y. J. Guo	1512
Synthetic Aperture Radar		
Sparse Flight Array SAR Downward-Looking 3-D Imaging Based on Compressed Sensing	H. Tian and D. Li	1395
Harbor Detection in Polarimetric SAR Images Based on the Characteristics of Parallel Curves	C. Liu, Y. Xiao, J. Yang, and J. Yin	1400
Unsupervised High-Level Feature Extraction of SAR Imagery With Structured Sparsity Priors and Incremental Dictionary Learning	J. Chen, L. Jiao, W. Ma, and H. Liu	1467
Unsupervised Classification of PolSAR Imagery via Kernel Sparse Subspace Clustering	H. Song, W. Yang, N. Zhong, and X. Xu	1487
Retrieval of Water Depth of Coastal Wetlands in the Yellow River Delta From ALOS PALSAR Backscattering Coefficients and Interferometry	M. Yuan, C. Xie, Y. Shao, J. Xu, B. Cui, and L. Liu	1517
Analysis of Full and Compact Polarimetric SAR Features Over the Sea Surface	A. Buono, F. Nunziata, and M. Migliaccio	1527
Noncircularity Parameters and Their Potential Applications in UHR MMW SAR Data Sets	W. Wu, X. Li, H. Guo, L. Ferro-Famil, and L. Zhang	1547
Road-Aided Doppler Ambiguity Resolver for SAR Ground Moving Target in the Image Domain	Z.-R. Wang, J. Xu, Z.-Z. Huang, X.-D. Zhang, X.-G. Xia, and T. Long	1552
A Soft Decision Rule for Sparse Signal Modeling via Dempster–Shafer Evidential Reasoning	G. Dong and G. Kuang	1567
APSAR 2015		
A Preliminary Study on SAR Advanced Information Retrieval and Scene Reconstruction	F. Xu, Y.-Q. Jin, and A. Moreira	1443
Analysis of Coastal Sedimentation Impact to Jakarta Giant Sea Wall Using PSI ALOS PALSAR	J. T. S. Sumantyo, B. Setiadi, D. Perissin, M. Shimada, P.-P. Mathieu, M. Urai, and H. Z. Abidin	1472

A Ground Moving Target Detection Approach Based on Shadow Feature With Multichannel High-Resolution Synthetic Aperture Radar	H. Xu, Z. Yang, G. Chen, G. Liao, and M. Tian	1572
A Novel Imaging Algorithm for Focusing High-Resolution Spaceborne SAR Data in Squinted Sliding-Spotlight Mode	J. Chen, H. Kuang, W. Yang, W. Liu, and P. Wang	1577
Adaptive Reduced-Rank Beamforming Method Based on Knowledge-Aided Joint Iterative Optimization	H. Shun, Y. Zhiwei, and L. Guisheng	1582

About the Cover: The capital city of Indonesia, Jakarta province, proposed the Jakarta Giant Sea Wall (JGSW) as a waterfront city for a new urban settlement zone and deep seaport for a new economic zone along the coastal area at northern Jakarta. Landuse change and land deformation at 11 watersheds of the West Java Mega Urban Region (WJMUR) were investigated using the persistent scatterer interferometry (PSI) technique of ALOS PALSAR in the period of 2007 to 2010. The result shows that landuse change and land deformation at the study area, especially Bandung city area, gives significant impact to sedimentation velocity along eastern Jakarta strait, especially deep seaport for 43 years later. For more information please see “Analysis of Coastal Sedimentation Impact to Jakarta Giant Sea Wall Using PSI ALOS PALSAR,” by Sumantyo *et al.*, which begins on page 1472.