

TABLE OF CONTENTS

Volume 4 Number 2

March 2013

The Application of Joint Inversion in Geophysical Exploration

Á. Gyulai, M. K. Baracza, É. E. Tolnai.....283

Parameters Identification of Stochastic Nonstationary Process Used in Earthquake Modelling

G. C. Marano, M. Morga, S. Sgobba.....290

Impact Estimation and Filtering of Disturbances in FG5 Absolute Gravimeter Observations

M. Orlob, A. Braun.....302

Heavy Metals in Urban Soils of Xuzhou, China: Spatial Distribution and Correlation to Specific Magnetic Susceptibility

X. S. Wang.....309

Tectonic Setting of the Cu-Ni Sulfide-Bearing Mafic-Ultramafic Complexes in Northern Jilin Province, NE China

D. C. Jia, S. Liu, H. Zhong, G. Y. Feng, Y. Q. Qi, W. Gao, X. Zhang, T. Jiang, Y. X. Mao.....317

Similarity Measures of Satellite Images Using an Adaptive Feature Contrast Model

H. Tang, A. Gong, S. D. Li, W. B. Yi, C. F. Yang.....329

Synchrotron-Based Data-Constrained Modeling Analysis of Microscopic Mineral Distributions in Limestone

Y. D. Wang, Y. S. Yang, T. Q. Xiao, K. Y. Liu, B. Clennell, G. Q. Zhang, H. P. Wang.....344

Interaction between Estuarine Microphytobenthos and Physical Forcings: The Role of Atmospheric and Sedimentary Factors

J. Pan, C. N. Bournod, D. G. Cuadrado, A. Vitale, M. C. Piccolo.....352

Coseismic Effects of the 2011 Magnitude 9.0 Tohoku-Oki Earthquake Measured at Far East Russia Continental Coast by Gravity and GPS Methods

V. Timofeev, R. Kulinich, M. Valitov, Y. Stus, E. Kalish, B. Ducarme, P. Gornov, D. Ardyukov, I. Sizikov, A. Timofeev, G. Gil'manova, T. Kolpashikova, Z. Proshkina.....362

Issues and Limitations of Broad Band Remote Sensing of Kimberlite—A Case Example from Kimberlites of Dharwar Craton, India

A. Guha, S. Ravi, D. Ananth Rao, K. Vinod Kumar, E. N. Dhananjaya Rao.....371

The Correlations between the Lightning Density Distribution of Sichuan Province and the Seismic Area

X. B. Jin, Z. M. Chen, Q. M. Ma, Y. D. Li, J. W. Pu.....380

Luminous Shapes with Unusual Motions as Potential Predictors of Earthquakes: A Historical Summary of the Validity and Application of the Tectonic Strain Theory

M. A. Persinger, J. S. Derr.....387

Modeling an Oil Spill along the Southern Brazilian Shelf: Forcing Characterization and Its Influence on the Oil Fate

C. E. Stringari, W. C. Marques, R. T. Eidt, L. F. Mello.....397

Strain Partitioning Controlled by Oblique Ramp in Intracratonic Chains in Tunisia: Example of Gafsa Basin

S. Amamria, M. S. Bensalem, E. Mercier, M. Ghanmi, F. Zargouni.....408

On Atmospheric-Oceanic-Land Temperature Variability and Trends

L. J. Pietrafesa, D. A. Dickey, P. T. Gayes, T. Z. Yan, J. M. Epps, M. Hagan, S. W. Bao, M. C. Peng.....417

Olive Mill Waste Water Management Study by Using Principal Component Analysis

H. Sahnoun, M. M. Serbaji, B. Karray, K. Medhioub.....444

**Identification of Forerunners and Transmission of Energy to Tsunami Waves Generated
by Instantaneous Ground Motion on a Non-Uniformly Sloping Beach**

A. Bandyopadhyay.....454

**Assessment of Factors Affecting Ephemeral Gully Development in Badland Topography:
A Case Study at Garbheta Badland (Pashchim Medinipur, West Bengal, India)**

P. K. Shit, G. S. Bhunia, R. Maiti.....461

**The Role of Remote Sensing and GIS for Locating Suitable Mangrove Plantation Sites
along the Southern Saudi Arabian Red Sea Coast**

I. H. Elsebaie, A. S. H. Aguib, D. Al Garni.....471

**Near Surface Fractures Evidence from Audio-Magnetotelluric (AMT) Investigation in
Ayos-Nguelemendouka Area (Eastern Cameroon)**

A. Meying, T. N. Mbarga, D. Gouet, P. A. Stéphane.....480

**Hydrodynamics between Africa and Antarctica during Austral Summer of 2008 and 2009:
Results of the IPY Project**

A. J. Luis, S. M. Pednekar.....494

**The Effect of Climate on the Chemical Composition of the Coral Reefs around
Kubbar Island—Kuwait**

A. J. Al-Langawi.....511

The figure on the front cover is from the article published in International Journal of Geosciences, 2013, Vol. 4, No. 2, pp. 511-528 by Alham Jassim Al-Langawi.