

Journal of Earth System Science

Vol. 116 (2007)

CONTENTS

Number 1

Editorial	1
Platinum group elements and gold in ferromanganese crusts from Afanasiy–Nikitin seamount, equatorial Indian Ocean: Sources and fractionation <i>V K Banakar, J R Hein, R P Rajani and A R Chodankar</i>	3
Facies characteristics of the basal part of the Talchir Formation, Talchir Basin, India – depositional history revisited <i>Prabir Dasgupta and Rishiraj Sahoo</i>	15
Domainal fabric development, associated microstructures and <i>P–T</i> records attesting to polymetamorphism in a granulite complex of the Eastern Ghats granulite belt, India <i>Rajib Kar</i>	21
The effects of attenuation and site on the spectra of microearthquakes in the Jubilee Hills region of Hyderabad, India <i>Saurabh Baruah, Devajit Hazarika, Naba K Gogoi and P Solomon Raju</i>	37
Spatial analyses of groundwater levels using universal kriging <i>Kemal Sulhi Gundogdu and Ibrahim Guney</i>	49
The light transmission and seiche depth of Izmir Bay, western Turkey <i>Erdem Sayin, Sezgi Adalioglu and Canan Eronat</i>	57
Long range prediction of Indian summer monsoon rainfall <i>A A Munot and K Krishna Kumar</i>	73

Number 2

Impact cratering – fundamental process in geoscience and planetary science <i>J K Pati and W U Reimold</i>	81
Quasi-static deformation due to two-dimensional seismic sources embedded in an elastic half-space in welded contact with a poroelastic half-space <i>Sunita Rani and Sarva Jit Singh</i>	99
Neotectonic aspects of the northern margin of the Adana–Cilicia submarine basin, NE Mediterranean <i>E Ozel, A Ulug and B Pekcetinöz</i>	113
Depositional conditions of the coal-bearing Hirka Formation beneath Late Miocene explosive volcanic products in NW central Anatolia, Turkey <i>Mehmet Şener</i>	125

Volatile displacement of Meghalaya coals – A pointer to explore low sulphur coals <i>P Behera</i>	137
Vesuvianite–wollastonite–grossular-bearing calc-silicate rock near Tatapani, Surguja district, Chhattisgarh <i>S C Patel</i>	143
The role of low-frequency intraseasonal oscillations in the anomalous Indian summer monsoon rainfall of 2002 <i>S Sajani, S Naseema Beegum and K Krishna Moorthy</i>	149
Sensitivity of surface radiation budget to clouds over the Asian monsoon region <i>S Balachandran and M Rajeevan</i>	159

Number 3

Climatic forcing before, during, and after the 8.2 Kyr B.P. global cooling event <i>Devendra Lal, William G Large and Stephan G Walker</i>	171
Fairweather atmospheric electricity at Antarctica during local summer as observed from Indian station, Maitri <i>C Panneerselvam, C Selvaraj, K Jeeva, K U Nair, C P Anilkumar and S Gurubaran</i>	179
Rainfall analysis for Indian monsoon region using the merged rain gauge observations and satellite estimates: Evaluation of monsoon rainfall features <i>S K Roy Bhowmik and Ananda K Das</i>	187
Estimation of seismic spectral acceleration in Peninsular India <i>S T G Raghu Kanth and R N Iyengar</i>	199
Seismicity pattern in north Sumatra–Great Nicobar region: In search of precursor for the 26 December 2004 earthquake <i>Sujit Dasgupta, Basab Mukhopadhyay and Auditeya Bhattacharya</i>	215
Elastic waves along a cylindrical borehole in a poroelastic medium saturated by two immiscible fluids <i>Ashish Arora and S K Tomar</i>	225
Monitoring the three-dimensional ionospheric electron density distribution using GPS observations over China <i>Wen Debao, Yuan Yunbin and Ou Jikun</i>	235
Geochemistry of some banded iron-formations of the archaean supracrustals, Jharkhand–Orissa region, India <i>H N Bhattacharya, Indranil Chakraborty and Kaushik K Ghosh</i>	245
Improved bathymetric datasets for the shallow water regions in the Indian Ocean <i>B Sindhu, I Suresh, A S Unnikrishnan, N V Bhatkar, S Neetu and G S Michael</i>	261

Number 4

Assimilation of Doppler weather radar observations in a mesoscale model for the prediction of rainfall associated with mesoscale convective systems <i>S Abhilash, Someshwar Das, S R Kalsi, M Das Gupta, K Mohankumar, J P George, S K Banerjee, S B Thampi and D Pradhan</i>	275
Surface and upper air meteorological features during onset phase of 2003 monsoon <i>O P Singh, H R Hatwar and Onkari Prasad</i>	305
Maximum daily rainfall in South Korea <i>Saralees Nadarajah and Dongseok Choi</i>	311
Identification of homogeneous rainfall regimes in parts of Western Ghats region of Karnataka <i>B Venkatesh and Mathew K Jose</i>	321
Vertical propagation of baroclinic Kelvin waves along the west coast of India <i>D Nethery and D Shankar</i>	331
Discharge estimation from planform characters of the Shedhi River, Gujarat alluvial plain: Present and past <i>Alpa Sridhar</i>	341
2-D Crustal thermal structure along Thuadara–Sindad DSS profile across Narmada–Son lineament, central India <i>S N Rai and S Thiagarajan</i>	347
Wave propagation in a general anisotropic poroelastic medium: Biot's theories and homogenisation theory <i>M D Sharma</i>	357

Number 5

Current status of multimodel superensemble and operational NWP forecast of the Indian summer monsoon <i>Akhilesh Kumar Mishra and T N Krishnamurti</i>	369
Link between convection and meridional gradient of sea surface temperature in the Bay of Bengal <i>D Shankar, S R Shetye and P V Joseph</i>	385
GPS satellite and receiver instrumental biases estimation using least squares method for accurate ionosphere modelling <i>G Sasibhushana Rao</i>	407
Strike slip faulting inferred from offsetting of drainages: Lower Narmada basin, western India <i>Rachna Raj</i>	413
Polyphase deformation and garnet growth in pelitic schists of Sausar Group in Ramtek area, Maharashtra, India: A study of porphyroblast–matrix relationship <i>A Chattopadhyay and N Ghosh</i>	423

Advective heat transfer and fabric development in a shallow crustal intrusive granite – the case of Proterozoic Vellaturu granite, south India <i>Dilip Saha and Sukanya Chakraborti</i>	433
Rainfall intensity characteristics at coastal and high altitude stations in Kerala <i>V Sasi Kumar, S Sampath, P V S S K Vinayak and R Harikumar</i>	451

Number 6

Editorial Emerging relevance of Earth System Science <i>T N Narasimhan</i>	465
Late Devonian and Triassic basalts from the southern continental margin of the East European Platform, tracers of a single heterogeneous lithospheric mantle source <i>Françoise Chalot-Prat, Petr Tikhomirov and Aline Saintot</i>	469
Geology and geochemistry of giant quartz veins from the Bundelkhand Craton, central India and their implications <i>J K Pati, S C Patel, K L Pruseth, V P Malviya, M Arima, S Raju, P Pati and K Prakash</i>	497
Geology and geochemistry of palaeoproterozoic low-grade metabasic volcanic rocks from Salumber area, Aravalli Supergroup, NW India <i>L S Shekhawat, M K Pandit and D W Joshi</i>	511
Origin of Cretaceous phosphorites from the onshore of Tamil Nadu, India <i>V Purnachandra Rao, Pratima M Kessarkar, R Nagendra and E V S S K Babu</i>	525
Effect of initial stress on reflection at the free surface of anisotropic elastic medium <i>M D Sharma</i>	537
Features of discrete VLF emissions observed at Gulmarg, India during the magnetic storm of 6–7 March, 1986 <i>R Singh, A K Singh, D Siingh and R P Singh</i>	553
Detecting areal changes in tidal flats after sea dike construction using Landsat-TM images <i>Moon Seong Kang, Sang June Im, Tae Il Jang, Seung Woo Park and Sang Min Kim</i>	561
FT-IR and XRD analysis of coal from Makum coalfield of Assam <i>Binoy K Saikia, R K Boruah and P K Gogoi</i>	575
Subject Index	581
Author Index	589
Acknowledgements	593