

Journal of Geomatics
(A publication of the Indian Society of Geomatics)

Editorial Board

Chief Editor: Prof. Ajai

(Address for Correspondence: Space Applications Centre, ISRO, Ahmedabad - 380 015)
Phone: +91-79-26913305 (O), 91-02717-235441 (R), Email: drajai1953@gmail.com

Associate Editor:

R. P. Dubey Ahmedabad, Email: rpDubey@hotmail.com

Assistant Editor:

Markand P. Oza SAC, Ahmedabad, Email: markand@sac.isro.gov.in

Members:

V. Balaji ICRISAT, Patancheru, Email: V.Balaji@cgiar.org

Mahesh Chandra NIC, New Delhi, Email: mchandra@nic.in

A.R. Dasgupta Ahmedabad, Email: arup@ieee.org

P.K. Garg IIT Roorkee, Email: gargpfce@iitr.ernet.in

A.K. Gosain Indian Institute of Technology, New Delhi, Email: gosain@civil.iitd.ernet.in

Ashok Kaushal Pune, Email: akaushal1960@yahoo.co.in

I.V. Murali Krishna Jawaharlal Nehru Technological University, Hyderabad, Email: ivm@ieee.org

V.N. Patkar Ex-Planner, MMRDA, Mumbai, Email: vnpatkar2004@yahoo.co.in

S.M. Ramasamy Bharathidasan University, Tiruchirapalli, Email: grucc@ruraluniv.ac.in

Aniruddha Roy Navayuga Engineering Co. Ltd., New Delhi, Email: aroy@navayuga.com

P.S. Roy Hyderabad, Email: psroy1952@yahoo.in

Milap Chand Sharma JNU, New Delhi, Email: milap@mail.jnu.ac.in

P. Venkatachalam CSRE, Indian Institute of Technology, Mumbai, Email: pvenk@csre.iitb.ac.in

Advisory Board

Paul J. Curran Vice-Chancellor, Bournemouth University, Poole, UK

V. Jayaraman Bengaluru, India

R. Krishnan Thiruvananthapuram, India

Sugata Mitra NIIT GIS Ltd, New Delhi, India

P. Nag Varanasi, India

M.P. Narayanan President, CSDMS, NOIDA, India

R.R. Navalgund ISRO H.Q., Bengaluru India

Y.S. Rajan ISRO H.Q., Bengaluru, India

R. Siva Kumar New Delhi, India

Josef Strobl Interfaculty Dept. of Geoinformatics, University of Salzburg, Austria

Indian Society of Geomatics Executive Council 2014 – 2017

President	A.S. Kiran Kumar , Space Applications Centre, Ahmedabad-380015
Vice-President	A.S. Rajawat , Space Applications Centre, Ahmedabad-380015 Pramod K. Verma , MPCOST, Bhopal-462003
Secretary	N.S. Mehta , Ahmedabad-380015
Joint Secretary	R. Nagaraja , National Remote Sensing Centre, Hyderabad-500037
Treasurer	K.P. Bharucha , Space Applications Centre, Ahmedabad-380015
Members	K.L.N. Sastry , Space Applications Centre, Ahmedabad-380015 G. Parthasarathy , NGRI, Hyderabad-500007 Shakil Ahmed Romshoo , Kashmir University, Srinagar-190006 P.M. Udani , Inst.of S&T for Adv. Studies & Res., VVNagar- 388120 S. Palria , M.D.S. University, Ajmer-305009
Ex-Officio (Immediate Past President)	Shailesh Nayak , MoES, New Delhi – 110003

Secretary : (address for correspondence)

39, Basant Bahar-II, Bopal, Ahmedabad – 380058, India

Email : nsmehtha55@gmail.com or secretary@isgindia.org

**Journal of
Geomatics**
(A publication of the Indian Society of
Geomatics)

Vol. 8 No. 2

2014

October

Research articles

- | | | |
|----|---|-----|
| 1 | Image quality assessment of RISAT-1 SAR using trihedral corner reflectors in different beams
Maneesha Gupta, Anuja Sharma and B. Kartikeyan | 130 |
| 2 | Landslide modelling and analysis using remote sensing and GIS: A case study of Cameron highland, Malaysia
Ismail Elmahdy Samy, Maged Mamoud Marghany and Mohamed Mostafa Mohameda | 140 |
| 3 | Mouza map updating by high resolution satellite images and GIS
Anirudha Paul | 148 |
| 4 | Re-engineering DEM to extract geomorphologic parameters for flood prediction in Ghana
George Owusu | 153 |
| 5 | Fusion of ascending and descending pass high resolution SAR data
R Chandrakanth, J. Saibaba, Geeta Varadan and P. Ananth Raj | 164 |
| 6 | Structural foot prints extraction from rocks of Lunawada region, Gujarat through IRS LISS III data
Aditya Joshi, M.A. Limaye and Bhushan S. Deota | 170 |
| 7 | Towards the expansion of orthometric correction in spherical harmonics
Raaed Mohamed Kamel Hassouna | 174 |
| 8 | Building subsidence estimation using PSInSAR technique: Case study of Mumbai city
Shweta Sharma, Y.S. Rao and Ajai | 181 |
| 9 | Multitemporal remote sensing of landscape dynamics and pattern change in Dire district, southern Ethiopia
Berhanu Keno and K.V. Suryabhagavan | 189 |
| 10 | Swarm intelligence inspired classifiers: A case study with remote sensing perspective
Shashi Kumar and Prafull Singh | 195 |
| 11 | Drainage basin analysis for characterization of 3rd order watersheds using Geographic Information System (GIS) and ASTER data
V. Anantha Rama | 200 |
| 12 | Monitoring rabi crop area using multi-year MODIS data: A case study of Gujarat, India
Neha Sharma, D. Ram Rajak, R.K. Jain, Sarvesh Palria and J.S. Parihar | 211 |
| 13 | Enhancing object boundaries by subpixel mapping of satellite image
Arun Kumar Rai and Kamal Jain | 216 |

14	Satellite visibility analysis for selecting optimal ground site based on simulated annealing algorithm	222
	M.I. Doma, Y.A. Faried, A.A. Sharkawi and M.T. Azmi	
15	Analyzing fluvial hydrological estimates and flood geomorphology from channel dimensions using ASTER DEM, GIS and statistics in the controlled Damodar river, India	232
	Sandipan Ghosh and Sanat Kumar Guchhait	
16	AltiKa backscatter coefficient variation over land	246
	Nilima Rani Chaube, B.K. Singh and Dhaval G. Patel	

Reviewers for Journal of Geomatics, Volume 8 No. 1 & 2	v
Author Index Volume 8	vi
ISG National Annual Awards	viii
Nomination Format for “National Geomatics Award for Excellence”	ix
Guidelines for "National Geomatics Award for Excellence”	x
National Geomatics	xi
Format for Award Nomination	xii
Fellows and Patron Members	xiii
Instructions for Authors	xiv
Journal of Geomatics: Advertisement Rates	xvi
Indian Society of Geomatics Membership form	xvii
Membership Subscription	xviii