



Geo-spatial Information Science (GSIS)
Papers on Classified Subjects (2010–2018)

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► Review ►

	Greg Scott and Abbas Rajabifard. 2017. “Sustainable development and geospatial information: a strategic framework for integrating a global policy agenda into national geospatial capabilities.” <i>Geo-spatial Information Science</i> 20 (2): 59–76. http://doi.org/10.1080/10095020.2017.1325594 .	
	Katherine Anderson, Barbara Ryan, William Sonntag, Argyro Kavvada and Lawrence Friedl. 2017. “Earth observation in service of the 2030 Agenda for Sustainable Development.” <i>Geo-spatial Information Science</i> 20 (2): 77–96. http://doi.org/10.1080/10095020.2017.1333230 .	
	Luis Bermudez. 2017. “New frontiers on open standards for geo-spatial science.” <i>Geo-spatial Information Science</i> 20 (2): 126–133. http://doi.org/10.1080/10095020.2017.1325613 .	
	Deren Li, Mi Wang, Zhipeng Dong, Xin Shen and Lite Shi. 2017. “Earth observation brain (EOB): an intelligent earth observation system.” <i>Geo-spatial Information Science</i> 20 (2): 134–140. http://doi.org/10.1080/10095020.2017.1329314 .	
	Juergen Dold and Jessica Groopman. 2017. “The future of geospatial intelligence.” <i>Geo-spatial Information Science</i> 20 (2): 151–162. http://doi.org/10.1080/10095020.2017.1337318 .	
	Shailesh Nayak. 2017. “Coastal zone management in India – present status and future needs.” <i>Geo-spatial Information Science</i> 20 (2): 174–183. http://doi.org/10.1080/10095020.2017.1333715 .	
R6	Khai Loong Chong, Kasturi Devi Kanniah, Christine Pohl and Kian Pang Tan. 2017. “A review of remote sensing applications for oil palm studies.” <i>Geo-spatial Information Science</i> 20 (2): 184–200. http://doi.org/10.1080/10095020.2017.1337317 .	

► Big Data ►








R1	Hong Shu. 2016. “Big data analytics: six techniques.” <i>Geo-spatial Information Science</i> 19 (2): 119–128. http://doi.org/10.1080/10095020.2016.1182307 .	
	Bin Li, Daniel A. Griffith and Brian Becker. 2016. “Spatially simplified scatterplots for large raster datasets.” <i>Geo-spatial Information Science</i> 19 (2): 81–93. http://doi.org/10.1080/10095020.2016.1179441 .	
	Miaoxi Zhao, Gaofeng Xu and Yun Li. 2016. “Evaluating urban public facilities of Shenzhen by application of open source data.” <i>Geo-spatial Information Science</i> 19 (2): 129–139. http://doi.org/10.1080/10095020.2016.1176724 .	
	Han Guo, Xiaoming Li, Weixi Wang, Zhihan Lv, Chen Wu and Weiping Xu. 2016. “An event-driven dynamic updating method for 3D geo-databases.” <i>Geo-spatial Information Science</i> 19 (2): 140–147. http://doi.org/10.1080/10095020.2016.1182808 .	
	Shuliang Wang, Ying Li and Dakui Wang. 2016. “Data field for mining big data.” <i>Geo-spatial Information Science</i> 19 (2): 106–118. http://doi.org/10.1080/10095020.2016.1179896 .	
	Ye Zhi, Haifeng Li, Dashan Wang, Min Deng, Shaowen Wang, Jing Gao, Zhengyu Duan and Yu Liu. 2016. “Latent spatio-temporal activity structures: a new approach to inferring intra-urban functional regions via social media check-in data.” <i>Geo-spatial Information Science</i> 19 (2): 95–105. http://doi.org/10.1080/10095020.2016.1176723 .	

► VGI (Volunteered Geographic Information) ►







	Stefan Hahmann, Jakob Miksch, Bernd Resch, Johannes Lauer and Alexander Zipf. 2017. “Routing through open spaces – a performance comparison of algorithms.” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2017.1399675 .	
	Gloria Bordogna, Steven Capelli, Daniele E. Ciriello and Giuseppe Psaila. 2017. “A cross-analysis framework for multi-source volunteered, crowdsourced, and authoritative geographic information: the case study of volunteered personal traces analysis against transport network data.” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2017.1374703 .	
	Franz-Benjamin Mocnik, Alexander Zipf and Martin Raifer. 2017. “The OpenStreetMap folksonomy and its evolution.” <i>Geo-spatial Information Science</i> 20 (3): 219–230. http://doi.org/10.1080/10095020.2017.1368193 .	
	Kiran Zahra, Frank O. Ostermann and Ross S. Purves. 2017. “Geographic variability of Twitter usage characteristics during disaster events.” <i>Geo-spatial Information Science</i> 20 (3): 231–240. http://doi.org/10.1080/10095020.2017.1371903 .	
	Lukasz Tracewski, Lucy Bastin and Cidalia C. Fonte. 2017. “Repurposing a deep learning network to filter and classify volunteered photographs for land cover and land use characterization.” <i>Geo-spatial Information Science</i> 20 (3): 252–268. http://doi.org/10.1080/10095020.2017.1373955 .	








Di Yang, Chiung-Shiuan Fu, Audrey C. Smith and Qiang Yu. 2017. “Open land-use map: a regional land-use mapping strategy for incorporating OpenStreetMap with earth observations.” <i>Geo-spatial Information Science</i> 20 (3): 269–281. http://doi.org/10.1080/10095020.2017.1371385 .	
D. Bégín, R. Devillers and S. Roche. 2017. “Contributors’ enrollment in collaborative online communities: the case of OpenStreetMap.” <i>Geo-spatial Information Science</i> 20 (3): 282–295. http://doi.org/10.1080/10095020.2017.1370177 .	
C. Jacobs and A. Zipf. 2017. “Completeness of citizen science biodiversity data from a volunteered geographic information perspective.” <i>Geo-spatial Information Science</i> 20 (1): 3–13. http://doi.org/10.1080/10095020.2017.1288424 .	
E. Abdolmajidi, A. Mansourian, J. Will and L. Harrie. 2015. “Matching authority and VGI road networks using an extended node-based matching algorithm.” <i>Geo-spatial Information Science</i> 18 (2–3): 65–80. http://doi.org/10.1080/10095020.2015.1071065 .	
Stefan Hahmann, Jakob Miksch, Bernd Resch, Johannes Lauer, and Alexander Zipf. 2017. “Routing through open spaces – a performance comparison of algorithms.” <i>Geo-spatial Information Science</i> (Published online 24 Nov. 2017) https://doi.org/10.1080/10095020.2017.1399675	
Gloria Bordogna, Steven Capelli, Daniele E. Ciriello, and Giuseppe Psaila. 2017. “A cross-analysis framework for multi-source volunteered, crowdsourced, and authoritative geographic information: the case study of volunteered personal traces analysis against transport network data.” <i>Geo-spatial Information Science</i> (Published online: 24 Oct 2017) https://doi.org/10.1080/10095020.2017.1374703	

► UAV (Unmanned Aerial Vehicle) ►

Julien Li-Chee-Ming and Costas Armenakis. 2018. “UAV navigation system using line-based sensor pose estimation.” <i>Geo-spatial Information Science</i> 21(1): 2–11. https://doi.org/10.1080/10095020.2017.1420506 .	
Olga Brovkina, Emil Cienciala, Peter Surov ý and Přemysl Janata. 2018. “Unmanned aerial vehicles (UAV) for assessment of qualitative classification of Norway spruce in temperate forest stands.” <i>Geo-spatial Information Science</i> 21(1): 12–20. https://doi.org/10.1080/10095020.2017.1416994 .	
Yuncheng Lu, Zhucun Xue, Gui-Song Xia and Liangpei Zhang. 2018. “A survey on vision-based UAV navigation.” <i>Geo-spatial Information Science</i> 21(1): 21–32. https://doi.org/10.1080/10095020.2017.1420509 .	
Huai Yu, Jinwang Wang, Yu Bai, Wen Yang and Gui-Song Xia. 2018. “Analysis of large-scale UAV images using a multi-scale hierarchical representation.” <i>Geo-spatial Information Science</i> 21(1): 33–44. https://doi.org/10.1080/10095020.2017.1418263 .	
Xinping Deng, Jinsong Chen, Hongzhong Li, Pengpeng Han and Wen Yang. 2018. “Log-cumulants of the finite mixture model and their application to statistical analysis of fully polarimetric UAVSAR data.” <i>Geo-spatial Information Science</i> 21(1): 45–55. https://doi.org/10.1080/10095020.2017.1419607 .	
Junfeng Lei, Shangyue Zhang, Li Luo, Jinsheng Xiao and He Wang. 2018. “Super-resolution enhancement of UAV images based on fractional calculus and POCS.” <i>Geo-spatial Information Science</i> 21(1): 56–66. https://doi.org/10.1080/10095020.2018.1424409 .	
Alexander V. Parshin, Vladimir A. Morozov, Anton V. Blinov, Alexey N. Kosterev and Alexander E. Budyak. 2018. “Low-altitude geophysical magnetic prospecting based on multirotor UAV as a promising replacement for traditional ground survey.” <i>Geo-spatial Information Science</i> 21(1): 67–74. https://doi.org/10.1080/10095020.2017.1420508 .	






► Remote sensing ►

Saeid Amini, Saeid Homayouni, Abdolreza Safari and Ali A. Darvishsefat. 2018. “Object-based classification of hyperspectral data using Random Forest algorithm.” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2017.1399674 . (Online)	
Gladys Villegas, Wenzhi Liao, Ronald Criollo, Wilfried Philips and Daniel Ochoa. 2017. “Detection of leaf structures in close-range hyperspectral images using morphological fusion” <i>Geo-spatial Information Science</i> 20 (4): 325–332. https://doi.org/10.1080/10095020.2017.1399673.s	
Yuyao Zhang, Yingying Ma, and Wei Gong. 2017. “Retrieval of Brown Carbon based on the aerosol complex refractive indices in the winter of Wuhan” <i>Geo-spatial Information Science</i> 20 (4): 319–324. https://doi.org/10.1080/10095020.2017.1394660 .	
C. A. Rishikeshan, and H. Ramesh. 2017. “A novel mathematical morphology based algorithm for shoreline extraction from satellite images.” <i>Geo-spatial Information Science</i> 20 (4): 345–352. https://doi.org/10.1080/10095020.2017.1403089 .	
Bin Zhao, Lianru Gao, Wenzhi Liao, and Bing Zhang. 2017. “A new kernel method for hyperspectral image feature extraction.” <i>Geo-spatial Information Science</i> 20 (4): 309–318. https://doi.org/10.1080/10095020.2017.1403088 .	
Xuehua Guan, Shuai Liao, Jie Bai, Fei Wang, Zhixin Li, Qiang Wen, Jianjun He, and Ting Chen. 2017. “Urban land-use classification by combining high-resolution optical and long-wave infrared images.” <i>Geo-spatial Information Science</i> 20 (4): 299–308. https://doi.org/10.1080/10095020.2017.1403731 .	





	Debasish Chakraborty, Sourabh Singh and Dibyendu Dutta. 2017. “ Segmentation and classification of high spatial resolution images based on Hölder exponents and variance. ” <i>Geo-spatial Information Science</i> 20 (1): 39–45. http://doi.org/10.1080/10095020.2017.1307660 .	
	Fangyuan Chen, Di Xiao and Zhuochao Li. 2016. “ Developing water quality retrieval models with in situ hyperspectral data in Poyang Lake, China. ” <i>Geo-spatial Information Science</i> 19 (4): 255–266. http://doi.org/10.1080/10095020.2016.1258201 .	
	Jun Pan and Mi Wang. 2016. “ Improved seeded region growing for detection of water bodies in aerial images. ” <i>Geo-spatial Information Science</i> 19 (1): 1–8. http://doi.org/10.1080/10095020.2015.1127628 .	
	Deren Li, Xia Zhao and Xi Li. 2016. “ Remote sensing of human beings – a perspective from nighttime light. ” <i>Geo-spatial Information Science</i> 19 (1): 69–79. http://doi.org/10.1080/10095020.2016.1159389 .	
	Xian Wu, Jianwei Peng, Jie Shan and Weihong Cui. 2015. “ Evaluation of semivariogram features for object-based image classification. ” <i>Geo-spatial Information Science</i> 18 (4): 159–170. http://doi.org/10.1080/10095020.2015.1116206 .	
	Qiang Qiang, Chunxia Zhou, Mingsheng Liao, Qiuyang Zhao and Zemin Wang. 2015. “ Elevation change around Dome A region of Antarctica from EnviSat satellite radar altimetry during 2002–2012. ” <i>Geo-spatial Information Science</i> 18 (4): 193–199. http://doi.org/10.1080/10095020.2015.1126072 .	
	Chao Song, and Ling Ke. 2015. “ Bathymetrical influences on spatial and temporal characteristics of chlorophyll-a concentrations in the Southern Ocean from 2002 to 2012 (October to March) using MODIS. ” <i>Geo-spatial Information Science</i> 18 (4): 200–211. http://doi.org/10.1080/10095020.2015.1126934 .	

► GIS ►






	Mohamed S. Bakli, Mahmoud A. Sakr and Taysir Hassan A. Soliman. 2018. “ A spatiotemporal algebra in Hadoop for moving objects. ” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2017.1413798 . (Online)	
	Yandong Wang, Mengling Qiao, Hui Liu and Xinyue Ye. 2018. “ Qualitative spatial reasoning on topological relations by combining the semantic web and constraint satisfaction. ” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2018.1430659 .	
	Christopher Gold. 2016. “ Tessellations in GIS: Part I – putting it all together. ” <i>Geo-spatial Information Science</i> 19 (1): 9–25. http://doi.org/10.1080/10095020.2016.1146440 .	
	Christopher Gold. 2016. “ Tessellations in GIS: Part II – making changes. ” <i>Geo-spatial Information Science</i> 19 (2): 157–167. http://doi.org/10.1080/10095020.2016.1182807 .	
R5	Shawky Mansour. 2016. “ Spatial analysis of public health facilities in Riyadh Governorate, Saudi Arabia: a GIS-based study to assess geographic variations of service provision and accessibility. ” <i>Geo-spatial Information Science</i> 19 (1): 26–38. http://doi.org/10.1080/10095020.2016.1151205 .	
	P. Boguslawski and C. Gold. 2015. “ Buildings and terrain unified – multidimensional dual data structure for GIS. ” <i>Geo-spatial Information Science</i> 18 (4): 151–158. http://doi.org/10.1080/10095020.2015.1123428 .	
	R. Li, J. Fan, X. Wang, Z. Zhou and H. Wu. 2015. “ Distributed cache replacement method for geospatial data using spatiotemporal locality-based sequence. ” <i>Geo-spatial Information Science</i> 18 (4): 171–182. http://doi.org/10.1080/10095020.2015.1123427 .	
	S.V. Kosyakov and A.M. Sadykov. 2015. “ GIS-based cost distribution analysis of new consumer connections to an urban power grid. ” <i>Geo-spatial Information Science</i> 18 (4): 183–192. http://doi.org/10.1080/10095020.2015.1128696 .	
	Jie He and Wei Wang. 2015. “ An integrated heterogeneous web service retrieval via combination of instance- and metadata-based schema matching method. ” <i>Geo-spatial Information Science</i> 18 (2-3): 111–123. http://doi.org/10.1080/10095020.2015.1065075 .	
	Yulin Ding, Qing Zhu and Hui Lin. 2014. “ An integrated virtual geographic environmental simulation framework: a case study of flood disaster simulation. ” <i>Geo-spatial Information Science</i> 17 (4): 190–200. http://doi.org/10.1080/10095020.2014.988199 .	
R10	Aditi Sarkar, Amit Ghosh and Pabitra Banik. 2014. “ Multi-criteria land evaluation for suitability analysis of wheat: a case study of a watershed in eastern plateau region, India. ” <i>Geo-spatial Information Science</i> 17 (2): 119–128. http://doi.org/10.1080/10095020.2013.774106 .	
	Mohammad H. Vahidnia and Ali A. Alesheikh. 2014. “ Ontological exploration of geospatial objects in context. ” <i>Geo-spatial Information Science</i> 17 (2): 129–138. http://doi.org/10.1080/10095020.2013.766397 .	
	S. Sugam, G. Shashi and T. U. Sunday. 2013. “ Parametric database approach integration for handling temporal data in GIS. ” <i>Geo-spatial Information Science</i> 16 (2): 91–99. http://doi.org/10.1080/10095020.2013.772807 .	

	J. Gong, H. Wu, T. Zhang, Z. Gui, Z. Li, L. You, S. Shen, J. Zheng, J. Geng, K. Qi, W. Yang, Z. Li and J. Yu. 2012. “Geospatial Service Web: towards integrated cyberinfrastructure for GIScience.” <i>Geo-spatial Information Science</i> 15 (2): 73–84. http://doi.org/10.1080/10095020.2012.714098 .	
C9	Che Mat Ruzinoor, Abdul Rashid Mohamed Shariff, Biswajeet Pradhan, Mahmud Rodzi Ahmad and Mohd Shafry Mohd Rahim. 2012. “A review on 3D terrain visualization of GIS data: techniques and software.” <i>Geo-spatial Information Science</i> 15 (2): 105–115. http://doi.org/10.1080/10095020.2012.714101 .	
	Deren Li and Xin Shen. 2010. “Geospatial information service based on digital measurable image.” <i>Geo-spatial Information Science</i> 13 (2): 79–84. http://doi.org/10.1007/s11806-010-0249-2 .	
C1	Biswajeet Pradhan, Ahmed Youssef and Renuganth Varathrajoo. 2010. “Approaches for delineating landslide hazard areas using different training sites in an advanced artificial neural network model.” <i>Geo-spatial Information Science</i> 13 (2): 93–102. http://doi.org/10.1007/s11806-010-0236-7 .	
	Tinghua Ai. 2010. “Constraints of progressive transmission of spatial data on the web.” <i>Geo-spatial Information Science</i> 13 (2): 85–92. http://doi.org/10.1007/s11806-010-0219-8 .	




► Photogrammetry ►

	Wenhao Zhao, Li Yan and Yunsheng Zhang. 2018. “Geometric-constrained multi-view image matching method based on semi-global optimization.” <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2018.1441754 .	
	Likun Liu, and Zhenfeng Shao. 2015. “Calibration of digital camera integration accuracy for low-cost oblique aerial photogrammetry.” <i>Geo-spatial Information Science</i> 18 (2–3): 90–96. http://doi.org/10.1080/10095020.2015.1071066 .	
	Jiyang Wang, Gongjian Wen and Deren Li. 2010. “Complex correspondences in straight line stereo matching.” <i>Geo-spatial Information Science</i> 13 (2): 103–110. http://doi.org/10.1007/s11806-010-0256-3 .	
	Xiuxiao Yuan, Xueping Zhang and Jianhong Fu. 2010. “Transformation method of exterior orientation angular elements obtained via position and orientation system under Gauss-Kruger projection coordinate system.” <i>Geo-spatial Information Science</i> 13 (3): 157–165. http://doi.org/10.1007/s11806-010-0334-6 .	

► SAR ►


	Jinghui Wang, Timo Balz and Mingsheng Liao. 2016. “Absolute geolocation accuracy of high-resolution spotlight TerraSAR-X imagery – validation in Wuhan.” <i>Geo-spatial Information Science</i> 19 (4): 267–272. http://doi.org/10.1080/10095020.2016.1258183 .	
	Yuzhou Liu, Mingsheng Liao, Xuguo Shi, Lu Zhang and Cory Cunningham. 2016. “Potential loess landslide deformation monitoring using L-band SAR interferometry.” <i>Geo-spatial Information Science</i> 19 (4): 273–277. http://doi.org/10.1080/10095020.2016.1258202 .	
	Yuting Dong, Lu Zhang and Mingsheng Liao. 2016. “Iteration convergence condition modeling for single spaceborne SAR image direct positioning.” <i>Geo-spatial Information Science</i> 19 (4): 278–284. http://doi.org/10.1080/10095020.2016.1258182 .	
	Xiaoguang Cheng, Wenli Huang, and Jianya Gong. 2015. “Adaptive polarimetric decomposition using incoherent ground scattering models without reflection symmetry assumption.” <i>Geo-spatial Information Science</i> 18 (1): 1–10. http://doi.org/10.1080/10095020.2015.1016201 .	
	D. Li, G. Zhang and X. Liu. 2012. “Application of the RPC model for spaceborne SAR image geometric processing.” <i>Geo-spatial Information Science</i> 15 (1): 3–9. http://doi.org/10.1080/10095020.2012.708144 .	

► Data Mining and Spatial Data Management ►



	Andreas Keler, Jukka M. Krisp and Linfang Ding. 2017. “Detecting vehicle traffic patterns in urban environments using taxi trajectory intersection points.” <i>Geo-spatial Information Science</i> 20 (4): 333–344. https://doi.org/10.1080/10095020.2017.1399672 .	
	Anahid Basiri, Mike Jackson, Pouria Amirian, Amir Pourabdollah, Monika Sester, Adam Winstanley, Terry Moore and Lijuan Zhang. 2016. “Quality assessment of OpenStreetMap data using trajectory mining.” <i>Geo-spatial Information Science</i> 19 (1): 56–68. http://doi.org/10.1080/10095020.2016.1151213 .	
	P. Boguslawski and C. Gold. 2015. “Buildings and terrain unified – multidimensional dual data structure for GIS.” <i>Geo-spatial Information Science</i> 18 (4): 151–158. http://doi.org/10.1080/10095020.2015.1123428 .	









	Rui Li, Jiawei Fan, Xinxing Wang, Zhen Zhou and Huayi Wu. 2015. “ Distributed cache replacement method for geospatial data using spatiotemporal locality-based sequence. ” <i>Geo-spatial Information Science</i> 18 (4): 171–182. http://doi.org/10.1080/10095020.2015.1123427 .	
	Ehsan Abdolmajidi, Ali Mansourian, Julian Will and Lars Harrie. 2015. “ Matching authority and VGI road networks using an extended node-based matching algorithm. ” <i>Geo-spatial Information Science</i> 18 (2–3): 65–80. http://doi.org/10.1080/10095020.2015.1071065 .	
	Hamidreza Houshiar, Jan Elseberg, Dorit Borrmann and Andreas Nüchter. 2015. “ A study of projections for key point based registration of panoramic terrestrial 3D laser scan. ” <i>Geo-spatial Information Science</i> 18 (1): 11–31. http://doi.org/10.1080/10095020.2015.1017913 .	
	J. Zhang, T. Zhu, Y. Tang and W. Zhang. 2014. “ Geostatistical approaches to refinement of digital elevation data. ” <i>Geo-spatial Information Science</i> 17 (4): 181–189. http://doi.org/10.1080/10095020.2014.985283 .	
C7	Wen Xu, Jianya Gong and Mi Wang. 2014. “ Development, application, and prospects for Chinese land observation satellites. ” <i>Geo-spatial Information Science</i> 17 (2): 102–109. http://doi.org/10.1080/10095020.2014.917454 .	
	K. Yarakula, D. Deb and B. Samanta. 2013. “ Comparative evaluation of Cartosat-1 and SRTM imageries for digital elevation modelling. ” <i>Geo-spatial Information Science</i> 16 (2): 75–82. http://doi.org/10.1080/10095020.2012.747645 .	
	Fangqu Niu and Changxiu Cheng. 2012. “ Novel approaches to the multiscalar display of vector data. ” <i>Geo-spatial Information Science</i> 15 (4): 251–261. http://doi.org/10.1080/10095020.2012.714102 .	
	Yonghai Chu and Jiancheng Li. 2012. “ Ice-sheet surface elevation change from crossover of ENVISAT data. ” <i>Geo-spatial Information Science</i> 15 (1): 67–71. http://doi.org/10.1080/10095020.2012.708160 .	

► Smart City (Digital Earth) ►










	Deren Li, Jie Shan, Zhenfeng Shao, Xiran Zhou, and Yuan Yao. 2013. “ Geomatics for Smart Cities – Concept, Key Techniques, and Applications. ” <i>Geo-spatial Information Science</i> 16 (1): 13–24. http://doi.org/10.1080/10095020.2013.772803 .	
	Gerhard Schmitt. 2013. “ Spatial modeling issues in future smart cities. ” <i>Geo-spatial Information Science</i> 16 (1): 7–12. http://doi.org/10.1080/10095020.2013.774107 .	
R2 C4	Wang Tao. 2013. “ Interdisciplinary urban GIS for smart cities: advancements and opportunities. ” <i>Geo-spatial Information Science</i> 16 (1): 5–34. http://doi.org/10.1080/10095020.2013.774108 .	
	Armin Gruen. 2013. “ SMART Cities: The need for spatial intelligence. ” <i>Geo-spatial Information Science</i> 16 (1): 3–6. http://doi.org/10.1080/10095020.2013.772802 .	
	Jianya Gong, Peng Yue, Tsehaie Woldai, Fuan Tsai, Anjana Vyas, Huayi Wu, Armin Gruen, Le Wang, and Igor Musikhin. 2017. “ Geoinformatics education and outreach: looking forward. ” <i>Geo-spatial Information Science</i> 20 (2): 209–217. http://doi.org/10.1080/10095020.2017.1337319 .	
R3	Xianfeng Huang. 2013. “ Building reconstruction from airborne laser scanning data. ” <i>Geo-spatial Information Science</i> 16 (1): 35–44. http://doi.org/10.1080/10095020.2013.774104 .	
	Stefan Müller Arisona, Chen Zhong, Xianfeng Huang, and Rongjun Qin. 2013. “ Increasing detail of 3D models through combined photogrammetric and procedural modelling. ” <i>Geo-spatial Information Science</i> 16 (1): 45–53. http://doi.org/10.1080/10095020.2013.774102 .	
	Xie Xiao, Xu Weiping, Zhu Qing, Zhang yeting and Du Zhiqiang. 2013. “ Integration method of TINs and Grids for multi-resolution surface modeling. ” <i>Geo-spatial Information Science</i> 16 (1): 61–68. http://doi.org/10.1080/10095020.2013.774109 .	
R4 C3	Deren LI, Jie SHAN, Zhenfeng SHAO, Xiran ZHOU & Yuan YAO. 2013. “ Geomatics for Smart Cities - Concept, Key Techniques, and Applications. ” <i>Geo-spatial Information Science</i> . 16 (1) : 13–24. https://doi.org/10.1080/10095020.2013.772803 .	

► GNSS ►

	Yan Zhou, Weisheng Wang, Di He and Zhe Wang. 2014. “ A fewest-turn-and-shortest path algorithm based on breadth-first search. ” <i>Geo-spatial Information Science</i> 17 (4): 201–207. http://doi.org/10.1080/10095020.2014.988198 .	
	Altti Jokinen, Shaojun Feng, Wolfgang Schuster, Washington Ochieng, Chris Hide, Terry Moore and Chris Hill. 2013. “ Integrity monitoring of fixed ambiguity Precise Point Positioning (PPP) solutions. ” <i>Geo-spatial Information Science</i> 16 (3): 141–148. http://doi.org/10.1080/10095020.2013.817111 .	

Xin Zhao, Xingqun Zhan and Kai Yan. 2013. “GNSS vulnerabilities: simulation, verification, and mitigation platform design.” <i>Geo-spatial Information Science</i> 16 (3): 149–154. http://doi.org/10.1080/10095020.2013.817109 .	
Khalid Nur, Shaojun Feng, Cong Ling and Washington Ochieng. 2013. “Integration of GPS with a WiFi high accuracy ranging functionality.” <i>Geo-spatial Information Science</i> 16 (3): 155–168. http://doi.org/10.1080/10095020.2013.817106 .	
Azmir Hasnur-rabiain, Allison Kealy and Mark Morelande. 2013. “INS stochastic error detection during kinematic tests and impacts on INS/GNSS performance.” <i>Geo-spatial Information Science</i> 16 (3): 169–176. http://doi.org/10.1080/10095020.2013.817108 .	
Bei Huang and Yang Gao. 2013. “Ubiquitous indoor vision navigation using a smart device.” <i>Geo-spatial Information Science</i> 16 (3): 177–185. http://doi.org/10.1080/10095020.2013.817110 .	
Lei Yang, Chris Hill and Terry Moore. 2013. “Numerical weather modeling-based slant tropospheric delay estimation and its enhancement by GNSS data.” <i>Geo-spatial Information Science</i> 16 (3): 186–200. http://doi.org/10.1080/10095020.2013.817107 .	
Shaojun Feng, Altti Jokinen, Carl Milner and Washington Ochieng. 2013. “New methods for dual constellation single receiver positioning and integrity monitoring.” <i>Geo-spatial Information Science</i> 16 (3): 201–209. http://doi.org/10.1080/10095020.2013.834112 .	
K. Shi, Y. Qiu, B. Zhao, J. Nie and Y. Chen. 2012. “Calibration of GPS receivers based on IGS and CORS techniques.” <i>Geo-spatial Information Science</i> 15 (3): 213–217. http://doi.org/10.1080/10095020.2012.720459 .	
Qinglin Zhu, Zhenwei Zhao, Leke Lin and Zhensen Wu. 2010. “Accuracy improvement of zenith tropospheric delay estimation based on GPS precise point positioning algorithm.” <i>Geo-spatial Information Science</i> 13 (4): 306–310. http://doi.org/10.1007/s11806-010-0400-0 .	
F. Guo, X. Zhang, X. Li and S. Cai. 2010. “Impact of sampling rate of IGS satellite clock on precise point positioning.” <i>Geo-spatial Information Science</i> 13 (2): 150–156. http://doi.org/10.1007/s11806-010-0226-9 .	

► LULC (Land Use and Land Cover) ►








Yong Xu and Bo Huang. 2014. “Spatial and temporal classification of synthetic satellite imagery: land cover mapping and accuracy validation.” <i>Geo-spatial Information Science</i> 17 (1): 1–7. http://doi.org/10.1080/10095020.2014.881959 .	
Yu Li and Yuanzhi Zhang. 2014. “Synthetic aperture radar oil spills detection based on morphological characteristics.” <i>Geo-spatial Information Science</i> 17 (1): 8–16. http://doi.org/10.1080/10095020.2014.883109 .	
Amy E. Frazier, Le Wang and Jin Chen. 2014. “Two new hyperspectral indices for comparing vegetation chlorophyll content.” <i>Geo-spatial Information Science</i> 17 (1): 17–25. http://doi.org/10.1080/10095020.2014.889264 .	
Peijun Du, Sicong Liu, Pei Liu, Kun Tan and Liang. 2014. “Sub-pixel change detection for urban land-cover analysis via multi-temporal remote sensing images.” <i>Geo-spatial Information Science</i> 17 (1): 26–38. http://doi.org/10.1080/10095020.2014.889268 .	
Xuehong Chen, Wentao Li, Jin Chen, Wenfeng Zhan and Yuhua Rao. 2014. “A simple error estimation method for linear-regression-based thermal sharpening techniques with the consideration of scale difference.” <i>Geo-spatial Information Science</i> 17 (1): 54–59. http://doi.org/10.1080/10095020.2014.889546 .	
Belinda A. Margono, Jean-Robert B. Bwangoy, Peter V. Potapov and Matthew C. Hansen. 2014. “Mapping wetlands in Indonesia using Landsat and PALSAR data-sets and derived topographical indices.” <i>Geo-spatial Information Science</i> 17 (1): 60–71. http://doi.org/10.1080/10095020.2014.898560 .	
Abhisek Santra, D. Mitra and Shreyashi Mitra. 2011. “Spatial modeling using high resolution image for future shoreline prediction along Junput Coast, West Bengal, India.” <i>Geo-spatial Information Science</i> 14 (3): 157–163. http://doi.org/10.1007/s11806-011-0522-z .	
C8 A. Hadeel, Mushtak Jabbar and Xiaoling Chen. 2011. “Remote sensing and GIS application in the detection of environmental degradation indicators.” <i>Geo-spatial Information Science</i> 14 (1): 39–47. http://doi.org/10.1007/s11806-011-0441-z .	
Shifa Ma, Jianhua He, Feng Liu and Yan Yu. 2011. “Land-use spatial optimization based on PSO algorithm.” <i>Geo-spatial Information Science</i> 14 (1): 54–61. http://doi.org/10.1007/s11806-011-0437-8 .	

► 3D GIS ►





Marc-O. Löwner. 2013. “3D topological relationships of landforms and their spatial schema-based representation.” <i>Geo-spatial Information Science</i> 16 (4): 238–246. http://doi.org/10.1080/10095020.2013.866616 .	
--	---


	Hugo Ledoux and Martijn Meijers. 2013. “ A star-based data structure to store efficiently 3D topography in a database. ” <i>Geo-spatial Information Science</i> 16 (4): 256–266. http://doi.org/10.1080/10095020.2013.866618 .	
	Hamidreza Houshiar, Jan Elseberg, Dorit Borrmann and Andreas Nüchter. 2015. “ A study of projections for key point based registration of panoramic terrestrial 3D laser scan. ” <i>Geo-spatial Information Science</i> 18 (1): 11–31. http://doi.org/10.1080/10095020.2015.1017913 .	
	Claire Ellul and Julia Altenbuchner. 2014. “ Investigating approaches to improving rendering performance of 3D city models on mobile devices. ” <i>Geo-spatial Information Science</i> 17 (2): 73–84. http://doi.org/10.1080/10095020.2013.866620 .	
	Hongchao Fan, Bo Mao, Jie Shen and Liqiu Meng. 2011. “ Shell model representation as a substitute of LoD3 for 3D modeling in CityGML. ” <i>Geo-spatial Information Science</i> 14 (2): 79–84. http://doi.org/10.1007/s11806-011-0445-8 .	
	Andreas Nüchter, Stanislav Gutev, Dorit Borrmann and Jan Elseberg. 2011. “ Skyline-based registration of 3D laser scans. ” <i>Geo-spatial Information Science</i> 14 (2): 85–90. http://doi.org/10.1007/s11806-011-0449-4 .	
	Ihab Hijazi, Sisi Zlatanova and Manfred Ehlers. 2011. “ NIBU: An integrated framework for representing the relation among building structure and interior utilities in micro-scale environment. ” <i>Geo-spatial Information Science</i> 14 (2): 98–108. http://doi.org/10.1007/s11806-011-0461-8 .	
	Kohei Ogawa, Edward Verbree, Sisi Zlatanova, Naohiko Kohtake and Yoshiaki Ohkami. 2011. “ Toward seamless indoor-outdoor applications: Developing stakeholder-oriented location-based services. ” <i>Geo-spatial Information Science</i> 14 (2): 109–118. http://doi.org/10.1007/s11806-011-0469-0 .	
C5	Marcus Goetz and Alexander Zipf. 2011. “ Formal definition of a user-adaptive and length-optimal routing graph for complex indoor environments. ” <i>Geo-spatial Information Science</i> 14 (2): 119–128. http://doi.org/10.1007/s11806-011-0474-3 .	
	Yeting Zhang, Qing Zhu, Gang Liu, Wenting Zheng, Zhonghua Li and Zhiqiang Du. 2011. “ GeoScope: Full 3D geospatial information system case study. ” <i>Geo-spatial Information Science</i> 14 (2): 150–156. http://doi.org/10.1007/s11806-011-0478-z .	

► Mobile Mapping with Ubiquitous Point Clouds ►






	Reiji Yoshimura, Hiroaki Date, Satoshi Kanai, Ryohei Honma, Kazuo Oda and Tatsuya Ikeda. 2016. “ Automatic registration of MLS point clouds and SfM meshes of urban area. ” <i>Geo-spatial Information Science</i> 19 (3): 171–181. http://doi.org/10.1080/10095020.2016.1212517 .	
	Zhizhong Kang. 2016. “ The applications of robust estimation method BaySAC in indoor point cloud processing. ” <i>Geo-spatial Information Science</i> 19 (3): 182–187. http://doi.org/10.1080/10095020.2016.1235818 .	
	Hongxing Sun, Leilei Li, Xuewen Ding and Bingxuan Guo. 2016. “ The precise multimode GNSS positioning for UAV and its application in large scale photogrammetry. ” <i>Geo-spatial Information Science</i> 19 (3): 188–194. http://doi.org/10.1080/10095020.2016.1234705 .	
	Joshua Hollick, Petra Helmholz and David Belton. 2016. “ Non-parametric belief propagation for mobile mapping sensor fusion. ” <i>Geo-spatial Information Science</i> 19 (3): 195–201. http://doi.org/10.1080/10095020.2016.1235816 .	
R7	M. Kalantari and M. Nechifor. 2016. “ Accuracy and utility of the Structure Sensor for collecting 3D indoor information. ” <i>Geo-spatial Information Science</i> 19 (3): 202–209. http://doi.org/10.1080/10095020.2016.1235817 .	
	Andrea Masiero, Francesca Fissore, Francesco Pirotti, Alberto Guarnieri and Antonio Vettore. 2016. “ Toward the use of smartphones for mobile mapping. ” <i>Geo-spatial Information Science</i> 19 (3): 210–221. http://doi.org/10.1080/10095020.2016.1234684 .	
	Nehla Ghouaiel and Sébastien Lefèvre. 2016. “ Coupling ground-level panoramas and aerial imagery for change detection. ” <i>Geo-spatial Information Science</i> 19 (3): 222–232. http://doi.org/10.1080/10095020.2016.1244998 .	

► Disaster Management ►








	Vinod Kumar Sharma, G. Srinivasa Rao, E. Amminedu, P. V. Nagamani, Abhinav Shukla, K. Ram Mohan Rao and V. Bhanumurthy. 2016. “ Event-driven flood management: design and computational modules. ” <i>Geo-spatial Information Science</i> 19 (1): 39–55. http://doi.org/10.1080/10095020.2016.1151212 .	
	Yulin Ding, Qing Zhu and Hui Lin. 2014. “ An integrated virtual geographic environmental simulation framework: a case study of flood disaster simulation. ” <i>Geo-spatial Information Science</i> 17 (4): 190–200. http://doi.org/10.1080/10095020.2014.988199 .	
	Jickjai Lee, Kyungmi Lee and Christopher Torpelund-Bruin. 2011. “ Raster Voronoi tessellation and its application to emergency modeling. ” <i>Geo-spatial Information Science</i> 14 (4): 235–245. http://doi.org/10.1007/s11806-011-0569-x .	
	F. Zhan, Yiqing Zhu, Jinsheng Ning, Jiangcun Zhou, Weifeng Liang and Yunma Xu. 2011. “ Gravity changes before large earthquakes in China: 1998–2005. ” <i>Geo-spatial Information Science</i> 14 (1): 1–9. http://doi.org/10.1007/s11806-011-0440-0 .	

Yaolin Liu, Wei Li, Guofeng Wu and Xinguo Xu. 2011. "Feasibility of estimating heavy metal contaminations in floodplain soils using laboratory-based hyperspectral data—A case study along Le'an River, China." <i>Geo-spatial Information Science</i> 14 (1): 10–16. http://doi.org/10.1007/s11806-011-0424-0 .	
---	---





► Cartography ►

Hiroyuki Goto and Yoichi Shimakawa. 2017. "Storage-efficient reconstruction framework for planar contours." <i>Geo-spatial Information Science</i> 20 (1): 14–28. http://doi.org/10.1080/10095020.2016.1194603 .	
B. Ayeni and K. J. Samuel. 2014. "An evaluation of digital elevation modeling in GIS and Cartography." <i>Geo-spatial Information Science</i> 17 (2): 139–144. http://doi.org/10.1080/10095020.2013.772808 .	
Bayan Alsaadeh, Ryutaro Tateishi, Dong Xuan Phong, Nguyen Thanh Hoan, Ahmad Al-Hanbali and Bai Xiulian. 2017. "New urban map of Eurasia using MODIS and multi-source geospatial data." <i>Geo-spatial Information Science</i> 20 (1): 29–38. http://doi.org/10.1080/10095020.2017.1288418 .	
R. Manonmani, S. Prabaharan, R. Vidhya and M. Ramalingam. 2012. "Application of GIS in urban utility mapping using image processing techniques." <i>Geo-spatial Information Science</i> 15 (4): 271–275. http://doi.org/10.1080/10095020.2012.714660 .	
Yin Htwe and Wenbin Shen. 2010. "Seismic hazard maps of Yangon and its surrounding areas." <i>Geo-spatial Information Science</i> 13 (3): 230–234. http://doi.org/10.1007/s11806-010-0300-3 .	



► Geophysics ►












Photis Patonis, Petros Patias, Ilias N. Tziavos, and Dimitrios Rossikopoulos. 2018. "A methodology for the performance evaluation of low-cost accelerometer and magnetometer sensors in geomatics applications." <i>Geo-spatial Information Science</i> (online published) https://doi.org/10.1080/10095020.2018.1424085 . (Online)	
Jingui Zou, Kien-Trinh Thi Bui, Yangxuan Xiao and Chinh Van Doan. 2017. "Dam deformation analysis based on BPNN merging models." <i>Geo-spatial Information Science</i> . https://doi.org/10.1080/10095020.2017.1386848 . (Online)	
X. Zou, J. Cai, N. Sneeuw and J. Li. 2011. "Numerical study on the mixed model in the GOCE polar gap problem." <i>Geo-spatial Information Science</i> 14 (3): 216–222. http://doi.org/10.1007/s11806-011-0532-x .	
Wei Chen and Wenbin Shen. 2011. "Polar motion of the triaxial nonrigid Earth and atmospheric excitation." <i>Geo-spatial Information Science</i> 14 (3): 223–229. http://doi.org/10.1007/s11806-011-0517-9 .	
X. Ke, Y. Wang and H. Xu. 2010. "Forward simulation of gravity for crustal structure of Xiachayu-Gonghe profile in eastern Tibetan plateau." <i>Geo-spatial Information Science</i> 13 (4): 300–305. http://doi.org/10.1007/s11806-010-0396-5 .	
Wei Chen, Wenbin Shen and Xiaofeng Qin. 2010. "New solution for the Earth's free wobble and its geophysical implications." <i>Geo-spatial Information Science</i> 13 (1): 49–55. http://doi.org/10.1007/s11806-010-0184-2 .	
R8 Nazan Yilmaz. 2008. "Comparison of different height systems." <i>Geo-spatial Information Science</i> 11 (3): 209–214. https://doi.org/10.1007/s11806-008-0074-z .	

► Geoinformatics Education ►

Deren Li, Jianya Gong and Peng Yue. 2014. "Geoinformatics education in China." 17 (4): 208–218. <i>Geo-spatial Information Science</i> http://doi.org/10.1080/10095020.2014.985282 .	
Igor A. Musikhin. 2014. "Encouraging active learning when teaching geospatial sciences." <i>Geo-spatial Information Science</i> 17 (4): 219–228. http://doi.org/10.1080/10095020.2014.989655 .	
Daniel A. Griffith. 2014. "Reflections on the current state of spatial statistics education in the United States: 2014." <i>Geo-spatial Information Science</i> 17 (4): 229–235. http://doi.org/10.1080/10095020.2014.986834 .	
W. Musakwa. 2017. "Perspectives on geospatial information science education: an example of urban planners in Southern Africa." <i>Geo-spatial Information Science</i> 20 (2): 201–208. http://doi.org/10.1080/10095020.2017.1339403 .	

► Geostatistics and Spatial Analysis ►

Anabele Lindner, Cira Souza Pitombo, Samille Santos Rocha and José Alberto Quintanilha. 2016. "Estimation of transit trip production using Factorial Kriging with External Drift: an aggregated data case study." <i>Geo-spatial Information Science</i> 19 (4): 245–254. http://doi.org/10.1080/10095020.2016.1260811 .	
Qiang Qiang, Chunxia Zhou, Mingsheng Liao, Qiuyang Zhao and Zemin Wang. 2015. "Elevation change around Dome A region of Antarctica from EnviSat satellite radar altimetry during 2002–2012." <i>Geo-spatial Information Science</i> 18 (4): 193–199. http://doi.org/10.1080/10095020.2015.1126072 .	

	Sangita Zope-Chaudhari, Parvatham Venkatachalam and Krishna Mohan Buddhiraju. 2015. "Assessment of distortion in watermarked geospatial vector data using different wavelets." <i>Geo-spatial Information Science</i> 18 (2-3): 124–133. http://doi.org/10.1080/10095020.2015.1071064 .	
	Jingxiang Zhang, Tao Zhu, Yunwei Tang and Wangle Zhang. 2014. "Geostatistical approaches to refinement of digital elevation data." <i>Geo-spatial Information Science</i> 17 (4): 181–189. http://doi.org/10.1080/10095020.2014.985283 .	
	M. Adnan, A. Leak and P. Longley. 2014. "A geocomputational analysis of Twitter activity around different world cities." <i>Geo-spatial Information Science</i> 17 (3): 145–152. http://doi.org/10.1080/10095020.2014.941316 .	
	Chengchao Zuo, Mark Birkin and Nicolas Malleson. 2014. "Spatial microsimulation modeling for residential energy demand of England in an uncertain future." <i>Geo-spatial Information Science</i> 17 (3): 153–169. http://doi.org/10.1080/10095020.2014.950717 .	
C2	Binbin Lu, Paul Harris, Martin Charlton and Chris Brunsdon. 2014. "The GWmodel R package: further topics for exploring spatial heterogeneity using geographically weighted models." <i>Geo-spatial Information Science</i> 17 (2): 85–101. http://doi.org/10.1080/10095020.2014.917453 .	
	Panagiotis Partsinevelos, Konstantinos Papadakis and Konstantinos Makantasis. 2014. "Spatiotemporal graph queries on geographic databases under a conceptual abstraction scale." <i>Geo-spatial Information Science</i> 17 (2): 110–118. http://doi.org/10.1080/10095020.2014.915482 .	
	Dionissios.P. Kalivas, Vassiliki.J. Kollias and Ektoras.H. Apostolidis. 2013. "Evaluation of three spatial interpolation methods to estimate forest volume in the municipal forest of the Greek island Skyros." <i>Geo-spatial Information Science</i> 16 (2): 100–112. http://doi.org/10.1080/10095020.2013.766398 .	
C6	Afshin Shariat Mohaymany, Matin Shahri and Babak Mirbagheri. 2013. "GIS-based method for detecting high-crash-risk road segments using network kernel density estimation." <i>Geo-spatial Information Science</i> 16 (2): 113–119. http://doi.org/10.1080/10095020.2013.766396 .	
	Limin Jiao and Yaolin Liu. 2012. "Analyzing the spatial autocorrelation of regional urban datum land price." <i>Geo-spatial Information Science</i> 15 (4): 263–269. http://doi.org/10.1080/10095020.2012.714103 .	
	P. N. Dadhich and S. Hanaoka. 2012. "Spatial investigation of the temporal urban form to assess impact on transit services and public transportation access." <i>Geo-spatial Information Science</i> 15 (3): 187–197. http://doi.org/10.1080/10095020.2012.715955 .	
	Yu Nong and Qingyun Du. 2011. "Urban growth pattern modeling using logistic regression." <i>Geo-spatial Information Science</i> 14 (1): 62–67. http://doi.org/10.1007/s11806-011-0427-x .	

Note:

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