Recent Literature

Compiled by Michael P. Finn

Atlases

Cook, E. R., K. J. Anchukaitis, B. M. Buckley, R. D. D'Arrigo, G. C. Jacoby and W. E. Wright. 2010. Asian monsoon failure and megadrought during the last millennium. *Science* 328(5977)**:** 486-489.

Maelfait, H. and K. Belpaeme. 2010. The Belgian Coastal Atlas: moving from the classic static atlas to an interactive data-driven atlas. *Journal of Coastal Conservation* 14(1)**:** 13-19.

Miller, A.-M. and L. Hanson. 2010. The maker and the monk: conservation of the Mercator Atlas of Europe. *Journal of the Institute of Conservation* 33(1)**:** 29-39.

Morelissen, R., A. C. Bijlsma and M. J. Tapley. 2010. A dedicated tidal stream atlas of the stratified tidal flows near Stonecutters Bridge, Hong Kong, based on 3D numerical simulations with HLES. *Journal of Hydro-Environment Research* 3(4)**:** 224-231.

Reed, P. M., B. Bills, M. Anderson, B. Ketchum and M. Piasecki. 2010. The Mid-Atlantic Watershed Atlas (MAWA): Open access data search & watershed-based community building. *Environmental Modelling & Software* 25(6)**:** 808-812.

Robertson, M. P., G. S. Cumming, B. F. N. Erasmus and M. P. Robertson. 2010. Getting the most out of atlas data. *Diversity & Distributions* 16(3)**:** 363-375.

Cartographers

Caquard, S. and A. Bryne. 2009. Mapping globalization: A conversation between a filmmaker and a cartographer. *Cartographic Journal* 46(1)**:** 372.

Hollard, C.-F. 2010. Nicolas Dipre cartographe: Histoire d'une œuvre (Nicolas Dipre, cartographer: History of a work). *Revue de l'Art* 167(1)**:** 25.

McCormack, D. D. 2010. My Years with Survey of Kenya. *Survey Review* 42(317)**:** 292.

Sánchez, A. 2010. La voz de los artesanos en el Renacimiento científico: Cosmógrafos y Cartógrafos en el preludio de la "nueva filosofía natural" (The voice of the artisans in the scientific Renaissance: Cosmographers and Cartographers in the prelude of the "new natural philosophy"). *Arbor* 186(743)**:** 449.

Scully, R. J. 2010. 'North Sea or German Ocean'? The Anglo-German Cartographic Freemasonry, 1842–1914. *Imago Mundi: The International Journal for the History of Cartography* 62(1)**:** 46-62.

Vandrei, C. 2009. Explorateur. *New York State Conservationist* 64(1)**:** 10-15.

Cartography

Baiocchi, V. and K. Lelo. 2010. Accuracy of 1908 high to medium scale cartography of Rome and its surroundings and related georeferencing problems. *Acta Geodaetica et Geophysica Hungarica* 45(1)**:** 97.

Cruz-Cárdenas, G., C. A. Ortiz-Solorio, E. Ojeda-Trejo, J. F. Martínez-Montoya, E. D. Sotelo-Ruiz and A. L. Licona-Vargas. 2010. Evaluation of four digital classifiers for automated cartography of local soil classes based on reflectance and elevation in Mexico. *International Journal of Remote Sensing* 31(3)**:** 665.

Fraser Taylor, D. R. and S. Pyne. 2010. The history and development of the theory and practice of cybercartography. *International Journal of Digital Earth* 3(1)**:** 2-15.

Iosifescu-Enescu, I., M. Hugentobler, L. Hurni and I. Iosifescu-Enescu. 2010. Web cartography with open standards - A solution to cartographic challenges of environmental management. *Environmental Modelling & Software* 25(9)**:** 988-999.

Langenberg, H. 2009. Cartography: Terra cognita. *Nature Geoscience* 2**:** 542.

Milieškaite, J. 2010. Kovariacijos metodo taikymas analizuojant (palyginant) skaitmeninius vaizdus kartografijoje (The application of covariation method to the analysis (comparable) of digital images in cartography). *Geodesy and Cartography* 36(1)**:** 30.

Smith, G. M. and R. D. Morton. 2010. Real world objects in GEOBIA through the exploitation of existing digital cartography and image segmentation. *Photogrammetric Engineering and Remote Sensing* 76(2)**:** 163.

Sutton, E. 2009. Mapping Meaning: Ethnography and Allegory in Netherlandish Cartography, 1570-1655. *Itinerario* 33(03)**:** 12-42.

Wang, H., L. Li, X. Zhang, H. Zhu and X. Zheng. 2010. Handling of relationship between residents and roads in digital cartography. *Liaoning Gongcheng Jishu Daxue Xuebao (Ziran Kexue Ban) [Journal of Liaoning Technical University (Natural Science Edition)]* 29(1)**:** 40.

Education (Cartography & GIScience)

Berlyant, A. M., I. K. Lurie, O. V. Tutubalina and E. R. Chalova. 2009. A concept of inovative university education in geographical cartography. *Vestnik Moskovskogo Universiteta, Seriya 5: Geografiya* (2)**:** 6.

Hermansen, S. 2010. Teaching cartography in academia: A historical reflection and discussion of a 2007 survey of Canadian universities. *Cartographica* 45(1)**:** 5.

Incekara, S. 2010. The place of geographic information systems (GIS) in the new geography curriculum of turkey and relevant textbooks: Is GIS contributing to the geography education in secondary schools? . *Scientific Research and Essays* 5(6)**:** 551.

Koch, W. G., M. Buchroithner, C. Rülke and C. Knust. 2010. Neuere Entwicklungen in der kartographischen Hochschulausbildung in deutschsprachigen Ländem (Recent developments in cartographic curricula in German-speaking countries). *Kartographische Nachrichten* 60(2)**:** 81.

Konečný, M. and K. Staněk. 2010. Adaptive cartography and geographical education. *International Research in Geographical and Environmental Education* 19(1)**:** 75-78.

Murphy, B. 2010. Map Interpretation and the Language of Maps. *Green Teacher* (88)**:** 27-30.

Papadimitriou, F. 2010. A "Neogeographical Education"? The Geospatial Web, GIS and Digital Art in Adult Education. *International Research in Geographical and Environmental Education* 19(1)**:** 71-74.

Petcovic, H. L., J. C. Libarkin and K. M. Baker. 2009. An empirical methodology for investigation geocognition in the field. *Journal of Geoscience Education* 57(4)**:** 316-328.

Rees, P. W. and J. A. Silberman. 2010. The Delaware Geography-Health Initiative: Lessons Learned in Designing a GIS-Based Curriculum. *Journal of Geography* 109(2)**:** 61-74.

Rød, J. K., W. Larsen and E. Nilsen. 2010. Learning geography with GIS: Integrating GIS into upper secondary school geography curricula. *Norsk Geografisk Tidsskrift (Norwegian Journal of Geography)* 64(1)**:** 21-35.

Swanson, M. T. and M. Bampton. 2009. Integrated digital mapping in geologic field research; an adventure-based approach to teaching new geospatial technologies in an REU Site Program. *Special Paper - Geological Society of America* 461**:** 117-133.

Generalization

Mariotti, S., L. Piscitello and S. Elia. 2010. Spatial agglomeration of multinational enterprises: the role of information externalities and knowledge spillovers. *Journal of Economic Geography* 10**:** 519-538.

Nocera, J. J. and G. J. Forbes. 2010. Incorporating Social Information to Improve the Precision of Models of Avian Habitat Use. *The Condor* 112(2)**:** 235-244.

Yu, F. L., Z. Y. Chen, X. Y. Ren and G. F. Yang. 2009. Analysis of historical floods on the Yangtze River, China; characteristics and explanations. *Geomorphology* 113(3-4)**:** 210-216.

Geographic Information

Buccella, A., A. Cechich, D. Gendarmi, F. Lanubile, G. Semeraro, A. Colagrossi and A. Buccella. 2010. GeoMergeP: Geographic Information Integration through Enriched Ontology Matching. *New Generation Computing* 28(1)**:** 41-71.

Charlier, N., G. De Tré, S. Gautama and R. Bellens. 2010. Automating actualisation of geographic information using the twofold fuzzy region model. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* 18(3)**:** 247.

de Róiste, M. 2009. Geographic information in eLocal government: evaluating online mapping applications in Irish local authorities. *Irish Geography* 42(2)**:** 165-183.

Ermoshin, V. V. Y., V.V.) and N. F. Pshenichnikova. 2009. Kartograficheskoye izucheniye pochvenno-geograficheskikh zakonomernostey basseyna Amura (Cartographic analysis of soils distribution in the Amur River basin). *Geografiya i Prirodnyye Resursy* 2009(4)**:** 25-32.

Ettazarini, S. 2010. GIS-based multi-source database, a strategic tool for sustainable development planning: case of Qalaat Mgouna, Morocco. *Environmental Earth Sciences* 1.

Hall, G. B., R. Chipeniuk, R. D. Feick, M. G. Leahy and V. Deparday. 2010. Community-based production of geographic information using open source software and Web 2.0. *International Journal of Geographical Information Science* 24(5)**:** 761.

Huang, C.-H., T.-R. Chuang, D.-P. Deng and H.-M. Lee. 2009. Building GML-native Web-based geographic information systems. *Computers & Geosciences* 35(9)**:** 1802-1816.

Karnatak, H., S. Saran, K. Bhatia and P. S. Roy. 2010. Geospatial database organization and spatial decision analysis for biodiversity databases in Web GIS environment. *Geocarto International* 25(1)**:** 3-23.

Kumar, M., G. Bhatt and C. J. Duffy. 2010. An object-oriented shared data model for GIS and distributed hydrologic models. *International Journal of Geographical Information Science* 24(7)**:** 1061-1079.

Li, D. and X. Qian. 2010. A brief introduction of data management for volunteered geographic information. *Wuhan Daxue Xuebao (Xinxi Kexue Ban) [Geomatics and Information Science of Wuhan University]* 35(4)**:** 379.

Li, Q., D. Su, H. Li, H. Liu and L. Sun. 2009. Approach to general data model of GIS symbol library and symbol library data exchange XML schema. *Geo-spatial Information Science* 12(4)**:** 235-242.

Roberts, J. J., B. D. Best, D. C. Dunn, E. A. Treml and P. N. Halpin. 2010. Marine Geospatial Ecology Tools: An integrated framework for ecological geoprocessing with ArcGIS, Python, R, MATLAB, and C++. *Environmental Modelling & Software* 25(10)**:** 1197-1207.

Shi, W., K. Kwan, G. Shea and C. Jiannong. 2009. A dynamic data model for mobile GIS. *Computers & Geosciences* 35(11)**:** 2210-2221.

GIS

Adham, M. I., C. S. Jahan, Q. H. Mazumder, M. M. A. Hossain and A.-M. Haque. 2010. Study on ground water recharge potentiality of Barind Tract, Rajshahi District, Bangladesh using GIS and remote sensing technique. *Journal of the Geological Society of India* 75(2)**:** 432-438.

Badland, H. M., M. J. Duncan, M. Oliver, J. S. Duncan and S. Mavoa. 2010. Examining commute routes: applications of GIS and GPS technology. *Environmental Health and Preventive Medicine*

Boroushaki, S. and J. Malczewski. 2010. Measuring consensus for collaborative decision-making: A GIS-based approach. *Computers, Environment and Urban Systems* 34(4)**:** 322.

Bothwell, J. and M. Yuan. 2010. Apply concepts of fluid kinematics to represent continuous space–time fields in temporal GIS. *Annals of GIS* 16(1)**:** 27-41.

Brenner, J., J. A. Jiménez and R. Sardá. 2010. Environmental Indicators GIS of the Catalan Coast. *Coastal Systems and Continental Margins* 13.

Brown, K. A. 2010. The Enterprise Value of Geographic Information System Technology at the St. Johns River Water Management District. *Water Resources Impact* 12(1)**:** 9.

Buckingham, F. and S. Shanee. 2009. Conservation Priorities for the Peruvian Yellow-Tailed Woolly Monkey (Oreonax flavicauda): A GIS Risk Assessment and Gap Analysis. *Primate Conservation* November**:** 65-71.

Buehlmann, E., B. Wolfgramm, D. Maselli, H. Hurni, S. R. Sanginov and H. P. Liniger. 2010. Geographic information system-based decision support for soil conservation planning in Tajikistan. *Journal of Soil and Water Conservation* 65(3)**:** 151-159.

Chiu, C.-A., P.-H. Lin and K.-C. Lu. 2009. GIS-based Tests for Quality Control of Meteorological Data and Spatial Interpolation of Climate Data. *Mountain Research and Development* 29(4)**:** 339-349.

Chung, J.-W. and J. D. Rogers. 2010. GIS-based virtual geotechnical database for the St. Louis metro area. *Environmental & Engineering Geoscience* 16(2)**:** 143-162.

Cinderby, S. 2010. How to reach the 'hard-to-reach': The development of Participatory Geographic Information Systems (P-GIS) for inclusive urban design in UK cities. *Area* 42(2)**:** 239.

Conte, D., M. M. Miglietta, A. Moscatello, S. Albers and V. Levizzani. 2010. A GIS approach to ingest Meteosat Second Generation data into the Local Analysis and Prediction System. *Environmental Modelling & Software* 25(10)**:** 1064-1074.

Davern, M. T. and X. Chen. 2010. Piloting the Geographic Information System (GIS) methodology as an analytic tool for Subjective Wellbeing Research. *Applied Research in Quality of Life* 5(2)**:** 105.

Diodato, N., M. Ceccarelli and G. Bellocchi. 2010. GIS-aided evaluation of evapotranspiration at multiple spatial and temporal climate patterns using geoindicators. *Ecological Indicators* 10(5)**:** 1009.

Dionisio, K. L., M. S. Rooney, R. E. Arku, A. B. Friedman, A. F. Hughes, J. Vallarino, S. Agyei-Mensah, J. D. Spengler and M. Ezzati. 2010. Within-neighborhood patterns and sources of particle pollution: Mobile monitoring and geographic information system analysis in four communities in Accra, Ghana. *Environmental Health Perspectives* 118(5)**:** 607.

Duval-Diop, D., A. Curtis and A. Clark. 2010. Enhancing equity with public participatory GIS in hurricane rebuilding: faith based organizations, community mapping, and policy advocacy. *Community Development* 41(1)**:** 32-49.

Evelyn, O. B. 2009. Utilizing geographic information system (GIS) to determine optimum forest cover for minimizing runoff in a degraded watershed in Jamaica. *International Forestry Review* 11(3)**:** 375-393.

Filintas, A., P. Dioudis and C. Prochaska. 2010. GIS modeling of the impact of drip irrigation, of water quality and of soil's available water capacity on Zea mays L. biomass yield and its biofuel potential. *Desalination and Water Treatment* 13(1-3)**:** 303-319.

Garrity, C. P. and D. R. Soller. 2009. Database of the geologic map of North America; adapted from the map by J. C. Reed, Jr. and others (2005). *U. S. Geological Survey Data Series* Report: DS-0424.

Gibbs, J. P., M. L. J. Hunter and E. J. Sterling. 2009. GIS for Conservation: Mapping and Analyzing Distributions of Wild Potato Species for Reserve Design. *Problem-Solving in Conservation Biology and Wildlife Management***:** 221-232.

Göçmen, Z. A. and S. J. Ventura. 2010. Barriers to GIS Use in Planning. *Journal of the American Planning Association* 76(2)**:** 172-183.

Gong, M., L. Wu, X.-y. Bi, L.-m. Ren, L. Wang, Z.-d. Ma, Z.-y. Bao and Z.-g. Li. 2010. Assessing heavy-metal contamination and sources by GIS-based approach and multivariate analysis of urban-rural topsoils in Wuhan, central China. *Environmental Geochemistry and Health* 32(1)**:** 59-72.

Granillo, J. A. J. 2010. GIS: Economic Common Sense for El Paso Water Utilities. *Water Resources Impact* 12(1)**:** 5.

Grounds, J. S. and B. T. Grimm. 2010. Save Money, Save Lives: How GIS Has Made the Identification of Flood Risks Easier, Faster, More Accurate, and Cheaper. *Water Resources Impact* 12(1)**:** 11.

Gundogdu, I. B. 2010. Applying linear analysis methods to GIS-supported procedures for preventing traffic accidents: Case study of Konya. *Safety Science* 48(6)**:** 763.

Hampson, J., S. Bourne and T. Singleton. 2010. Return on Investment From New GIS Technologies for Water Resources Engineering, Science, and Planning. *Water Resources Impact* 12(1)**:** 13.

Jamali, A. A. and A. Abdolkhani. 2009. Preparedness against landslide disasters with mapping of landslide potential by GIS-SMCE (Yazd, Iran). *International Journal of Geoinformatics* 5(4)**:** 25-31.

Jan, S.-S., L.-T. Hsu and W.-M. Tsai. 2010. Development of an Indoor Location Based Service Test Bed and Geographic Information System with a Wireless Sensor Network. *Sensors* 10(4)**:** 2957-2974.

Katsamudanga, S. 2009. Past, present and future applications of Geographic Information Systems in Zimbabwean archaeology. *Azania: Archaeological Research in Africa* 44(3)**:** 293-310.

Kelsey, R. H., G. I. Scott, D. E. Porter, T. C. Siewicki and D. G. Edwards. 2010. Improvements to Shellfish Harvest Area Closure Decision Making Using GIS, Remote Sensing, and Predictive Models. *Estuaries and Coasts* 33(3)**:** 712-722.

Khan, S. A., J. Wahr, M. Bevis, I. Velicogna and E. Kendrick. 2010. Spread of ice mass loss into northwest Greenland observed by GRACE and GPS. *Geophysical Research Letters* 37(06).

Klinsky, S., R. Sieber and T. Meredith. 2010. Connecting Local to Global: Geographic Information Systems and Ecological Footprints as Tools for Sustainability. *The Professional Geographer* 62(1)**:** 84-309.

Lai, P. C., A. S. H. Mak, F. M. So, T. S. Leung and K. H. Kwong. 2010.) Modelling voter behaviours by geographic information technology: a case of Hong Kong in 2004. *Annals of GIS* 16(1)**:** 15-25.

Li, B. and J.-T. Zhang. 2010. Study on Soil Erosion of Different Vegetation Regions in Loess Plateau Based on GIS. *Journal of Agro-Environment Science* 29(1)**:** 134-138.

Li, C., T. Ma and X. Zhu. 2010. aiNet- and GIS-based regional prediction system for the spatial and temporal probability of rainfall-triggered landslides. *Natural Hazards* 52(1)**:** 57-78.

Lin, C. E., C. M. Kao, Y. C. Lai, W. L. Shan and C. Y. Wu. 2009. Application of integrated GIS and multimedia modeling on NPS pollution evaluation. *Environmental Monitoring and Assessment* 158(1-4)**:** 319-331.

Magliulo, P., A. Di Lisio and F. Russo. 2009. Comparison of GIS-based methodologies for the landslide susceptibility assessment. *GeoInformatica* 13(3)**:** 253-265.

Malik, R. N., W. A. Jadoon and S. Z. Husain. 2010. Metal contamination of surface soils of industrial city Sialkot, Pakistan: a multivariate and GIS approach. *Environmental Geochemistry and Health* 32(3)**:** 179-191.

Malinowska, A. and R. Hejmanowski. 2010. Building damage risk assessment on mining terrains in Poland with GIS application. *International Journal of Rock Mechanics and Mining Sciences* 47(2)**:** 238-245.

Mancini, F., F. Stecchi and G. Gabbianelli. 2009. GIS-based assessment of risk due to salt mining activities at Tuzla (Bosnia and Herzegovina). *Engineering Geology* 109(3-4)**:** 170-182.

Mironova, M. O., A. S. Velichkin, A. N. Ivanov, K. Y. Kolybanov and R. Y. Kuzin. 2009. Razrabotka ekologicheskoy GIS rezervnykh mestorozhdeniy El'konskogo uranovorudnogo rayona. (Ecological geographic information system for the Elkon uranium ore district). *Geoekologiya* 2009(5)**:** 470-476.

Moeyersons, J., P. Trefois, L. Nahimana, L. Ilunga, I. Vandecasteele, V. Byizigiro and S. Sadiki. 2010. River and landslide dynamics on the western Tanganyika rift border, Uvira, D.R. Congo: diachronic observations and a GIS inventory of traces of extreme geomorphologic activity. *Natural Hazards* 53(2)**:** 291-311.

Olmos, M. A. and G. F. Birch. 2010. A novel method using sedimentary metals and GIS for measuring anthropogenic change in coastal lake environments. *Environmental Science and Pollution Research International* 17(2)**:** 270-287.

Petrie, E. J., M. A. King, P. Moore and D. A. Lavallee. 2010. Higher-order ionospheric effects on the GPS reference frame and velocities. *Journal of Geophysical Research. B. Solid Earth* 115(B03).

Pires, A. C., A. Gomes and H. I. Chamine. 2009. Dynamics of coastal systems using GIS analysis and geomaterials evaluation for groins. *Environmental & Engineering Geoscience* 15(4)**:** 245-260.

Pultar, E., T. J. Cova, M. Yuan and M. F. Goodchild. 2010. EDGIS: a dynamic GIS based on space time points. *International Journal of Geographical Information Science* 24(3)**:** 329-346.

Ranatunga, K., E. R. Nation and G. Barodien. 2010. Potential use of saline groundwater for irrigation in the Murray hydrogeological basin of Australia. *Environmental Modelling & Software* 25(10)**:** 1188-1196.

Rees, S. E., L. D. Rodwell, M. J. Attrill, M. C. Austen and S. C. Mangi. 2010. The value of marine biodiversity to the leisure and recreation industry and its application to marine spatial planning. *Marine Policy* 34(5)**:** 868.

Salap, S., M. O. Karslioglu and N. Demirel. 2009. Development of a GIS-based monitoring and management system for underground coal mining safety. *International Journal of Coal Geology* 80(2)**:** 105-112.

Santini, M., G. Caccamo, A. Laurenti, S. Noce and R. Valentini. 2010. A multi-component GIS framework for desertification risk assessment by an integrated index. *Applied Geography* 30(3)**:** 394.

Settimi, J. R., D. G. Sullivan and T. C. Strickland. 2010. The evaluation of conservation practice placement in the Little River Experimental Watershed using geographic information systems. *Journal of Soil and Water Conservation* 65(3)**:** 160-167.

Singh, S., A. B. Samaddar and R. K. Srivastava. 2010. Sustainable drinking water management strategy using GIS: Case study of Allahabad City (India). *Management of Environmental Quality: An International Journal* 21(4)**:** 436-451.

Smith, R. and C. Rintoul. 2010. Critical Success Factors for Enterprise GIS: Beyond ROI. *Water Resources Impact* 12(1)**:** 16.

Sonneveld, M. P. W., M. J. D. Hack-ten Broeke, C. A. van Diepen and H. L. Boogaard. 2010. Thirty years of systematic land evaluation in the Netherlands. *Geoderma* 156(3-4)**:** 84-92.

Strager, M. P., J. J. Fletcher, J. M. Strager, C. B. Yuill, R. N. Eli, J. Todd Petty and S. J. Lamont. 2010. Watershed analysis with GIS: The watershed characterization and modeling system software application. *Computers and Geosciences* 36(7)**:** 970.

Suparta, W., B. Yatim and M. A. Mohd Ali. 2010. Solar forcing on Antarctic terrestrial climate: A study by means of GPS observations. *Acta Geophysica* 58(2)**:** 374-391.

Tang, T., W. Zhao, H. Gong, X. Li, K. Zang, J. D. Bernosky, W. Zhao and S. Li. 2010. GIS spatial analysis of population exposure to fine particulate air pollution in Beijing, China. *Environmental Geosciences* 17(1)**:** 1-16.

Tarhule, A., Z. Saley-Bana and P. J. Lamb. 2009. Rainwatch. *Bulletin of the American Meteorological Society* 90(11)**:** 1607-1614.

Terranova, O., L. Antronico, R. Coscarelli and P. Iaquinta. 2009. Soil erosion risk scenarios in the Mediterranean environment using RUSLE and GIS; an application model for Calabria (southern Italy). *Geomorphology* 112(3-4)**:** 228-245.

Torbick, N. M., B. L. Becker, S. L. Hession, J. Qi, G. J. Roloff and R. Jan Stevenson. 2010. Assessing invasive plant infestation and disturbance gradients in a freshwater wetland using a GIScience approach. *Wetlands Ecology and Management* 18(3)**:** 307-319.

Trigila, A., C. Iadanza and D. Spizzichino. 2010. Quality assessment of the Italian Landslide Inventory using GIS processing. *Landslides***:** 1.

Tuefekci, N., M. L. Suezen and N. Guelec. 2010. GIS based geothermal potential assessment: A case study from Western Anatolia, Turkey. *Energy* 35(1)**:** 246-261.

Uhlmann, S., E. Galanis, T. Takaro, S. Mak, L. Gustafson, G. Embree, N. Bellack, K. Corbett and J. Isaac-Renton. 2009. Where's the pump? Associating sporadic enteric disease with drinking water using a geographic information system, in British Columbia, Canada, 1996-2005. *Journal of Water and Health* 7(4)**:** 692-698.

Valle, M. A., R. S. Smith and P. Keating. 2010. Case history of combined airborne time-domain electromagnetics and power-line field survey in Chibougamau, Canada. *Geophysics* 75.

Van Hoesen, J. and S. Letendre. 2010. Evaluating potential renewable energy resources in Poultney, Vermont: A GIS-based approach to supporting rural community energy planning. *Renewable Energy* 35(9)**:** 2114.

Wang, H.-H. 2010. GIS-based Location and Dispatch System for Patrol and Inspection Vehicles for Drainage Network. *China Water & Wastewater* 26(10)**:** 24-27.

Wang, W., H. Li, X. Wang and Y. Liu. 2010. Spatial variations of aluminum species in drinking water supplies in Xi'an studied applying geographic information system. *Journal of Environmental Sciences* 22(4)**:** 519.

Wu, W., X. Ma, X. Chen, T. Yang and A. Zhang. 2010. Temporal-spatial variations of reference crop evapotranspiration in Anhui Province in recent 35 years supported by GIS. *Nongye Gongcheng Xuebao (Transactions of the Chinese Society of Agricultural Engineering)* 26(2)**:** 251-256.

Yang, Q., Z. Zhao, T. L. Chow, H. W. Rees, C. P. A. Bourque and F.-R. Meng. 2009. Using GIS and a digital elevation model to assess the effectiveness of variable grade flow diversion terraces in reducing soil erosion in northwestern New Brunswick, Canada. *Hydrological Processes* 23(23)**:** 3271-3280.

Yin, L., Z.-P. Yang, W.-B. Zhou and Y. Luo. 2010. Application of GIS in the Geo - environment Quality Assessment. *Water Conservancy Science and Technology and Economy* 16(1)**:** 105-107.

Zavalaga, C. B., J. Halls and G. Dell'Omo. 2010. Marine habitat use of Peruvian boobies: a geographic and oceanographic comparison between inshore and offshore islands. *ICES Journal of Marine Science* 67**:** 940-951.

Zhang, H., A. Bevan, D. Fuller and Y. Fang. 2010. Archaeobotanical and GIS-based approaches to prehistoric agriculture in the upper Ying valley, Henan, China. *Journal of Archaeological Science* 37(7)**:** 1480.

Zhang, Q., Z. Yang, Y. Li, D. Chen, J. Zhang and M. Chen. 2010. Spatial variability of soil nutrients and GIS-based nutrient management in Yongji County, China. *International Journal of Geographical Information Science* 24(7)**:** 965-981.

Zhu, D., T. Wang, C. Cai, L. Li and Z. Shi. 2010. Rapid assessment of regional soil erosion based on fuzzy neural system and GIS. *Nongye Gongcheng Xuebao (Transactions of the Chinese Society of Agricultural Engineering)* 26(1)**:** 103-107.

Zuo, Z.-J. and S.-P. Zhou. 2010. Building basic geographic information mapset model based on MapGIS data center. *Diqiu Kexue - Zhongguo Dizhi Daxue Xuebao (Earth Science - Journal of China University of Geosciences)* 35(3)**:** 391.

GIScience

Elwood, S. 2010. Geographic information science: Emerging research on the societal implications of the geospatial web. *Progress in Human Geography* 34(3)**:** 349.

Mennis, J. 2010. Multidimensional Map Algebra: Design and Implementation of a Spatio-Temporal GIS Processing Language. *Transactions in GIS* 14(1)**:** 1-21.

Torrens, P. M. 2010. Geography and computational social science. *GeoJournal* 75(2)**:** 133-148.

History of Cartography

Angel, S. D. 2009. Aportes de Brian Harley a la nueva historia de la cartografía y escenario actual del campo en Colombia, América Latina y el Mundo (The contributions of Brian Harley to the new history of cartography, and the current state of affairs in Colombia, Latin America, and the World). *Historia Critica* 39**:** 180.

Edney, M. H. 2009. The Anglophone Toponyms Associated with John Smith's Description and Map of New England. *Names* 57(4)**:** 189.

Millea, N. 2010. Literature for 2007 to 2009 in the History of Cartography. *Imago Mundi* 62(2)**:** 286-308.

Murray, J. S. 2009. Blueprinting in the History of Cartography. *The Cartographic journal* 46(3)**:** 257.

Pearce, M. W. and M. J. Hermann. 2010. Mapping Champlain's travels: Restorative techniques for historical cartography. *Cartographica* 45(1)**:** 32.

Information Retrieval

Brisaboa, N. R., M. R. Luaces, A. S. Places and D. Seco. 2010. Exploiting geographic references of documents in a geographical information retrieval system using an ontology-based index. *GeoInformatica* 14(3)**:** 307.

Kuai, L., V. Natraj, R.-L. Shia, C. Miller and Y. L. Yung. 2010. Channel selection using information content analysis: A case study of CO2 retrieval from near infrared measurements. *Journal of Quantitative Spectroscopy and Radiative Transfer* 111(9)**:** 1296.

Integration

Aurbacher, J. and S. Dabbert. 2009. Integrating GIS-based field data and farm modeling in a watershed to assess the cost of erosion control measures; an example from southwest Germany. *Journal of Soil and Water Conservation* 64(5)**:** 350-362.

Bingham, A. W., S. McCleese, T. Stough, R. G. Deen, K. Hussey and N. Toole. 2009. Geo-Information Systems - Earth Science Datacasting: Informed Pull and Information Integration. *IEEE transactions on geoscience and remote sensing* 47(10)**:** 3570.

Gosain, A. K., S. Rao, P. Singh and A. Arora. 2010. Integration of Bio-Geo spatial database for selected watersheds in Himalayan region. *Current Science* 98(2)**:** 183-191.

Pan, M.-L. and H.-Y. Tao. 2009. Integration technique between java-swarm and GIS on urban geo-simulation. *Xitong Fangzhen Xuebao (Journal of System Simulation)* 21(18)**:** 5704.

Map Design/Compilation/Production

Ausejo, M., M. Recuero, C. Asensio, I. Pavon and J. M. Lopez. 2010. Study of Precision, Deviations and Uncertainty in the Design of the Strategic Noise Map of the Macrocenter of the City of Buenos Aires, Argentina. *Environmental Modeling & Assessment* 15(2)**:** 125-135.

Becker, R. H., M. I. Sultan, G. L. Boyer, M. R. Twiss and E. Konopko. 2009. Mapping Cyanobacterial Blooms in the Great Lakes Using MODIS. *Journal of Great Lakes Research* 35(3)**:** 447-453.

Chenini, I., A. B. Mammou and M. El May. 2010. Groundwater Recharge Zone Mapping Using GIS-Based Multi-criteria Analysis: A Case Study in Central Tunisia (Maknassy Basin). *Water Resources Management* 24(5)**:** 921-939.

Kaeser, A. J. and T. L. Litts. 2010. A Novel Technique for Mapping Habitat in Navigable Streams Using Low-cost Side Scan Sonar. *Fisheries* 35(4)**:** 163-174.

Marvin, D. C., B. A. Bradley and D. S. Wilcove. 2009. A Novel, Web-Based, Ecosystem Mapping Tool Using Expert Opinion. *Natural Areas Journal* 29(3)**:** 281-292.

Mekhbaliyev, M. M. 2009. Metodika sostavleniya karty energii rel'yefa (Method of relief energy map compilation). *Geomorfologiya* 2009(4)**:** 45-52.

Nas, B. and A. Berktay. 2010. Groundwater quality mapping in urban groundwater using GIS. *Environmental Monitoring and Assessment* 160(1-4)**:** 215-227.

Nobi, E. P., A. Shivaprasad, R. Karikalan, E. Dilipan, T. Thangaradjou and K. Sivakumar. 2010. Microlevel Mapping of Coastal Geomorphology and Coastal Resources of Rameswaram Island, India: A Remote Sensing and GIS Perspective. *Journal of Coastal Research* 26(3)**:** 424-428.

Paelke, V. and M. Sester. 2010. Augmented paper maps: Exploring the design space of a mixed reality system. *ISPRS Journal of Photogrammetry and Remote Sensing* 65(3)**:** 256.

Shaban, M., B. Urban, A. El Saadi and M. Faisal. 2010. Detection and mapping of water pollution variation in the Nile Delta using multivariate clustering and GIS techniques. *Journal of Environmental Management* 91(8)**:** 1785.

Shafri, H. M., I. M. Zahidi and S. A. Bakar. 2010. Development of landslide susceptibility map utilizing remote sensing and Geographic Information Systems (GIS). *Disaster Prevention and Management* 19(1)**:** 59-69.

Suvorov, E. G., Y. M. Semenov and N. I. Novitskaya. 2009. Landshaftno-otsenochnaya karta aziatskoy chasti Rossii; printsipy i metodicheskiye aspekty sostavleniya (Map of landscapes in the Asian part of Russia; principles and methods of compilation). *Geografiya i Prirodnyye Resursy* 2009(4)**:** 5-10.

Zol'nikov, I. D., A. Y. Korolyuk, E. N. Smolentseva, V. A. Lyamina, N. N. Dobretsov and U. V. Martysevich. 2010. Compilation of database for map-making and modeling of ground ecosystems with the means of GIS and remote sensing illustrated by Chuya steppe of Gorny Altai. *Contemporary Problems of Ecology* 3(2).

Map Use/Users

Maze, G., F. Gael, M. Buckley, J. Marshall and I. Cerovecki. 2009. Using Transformation and Formation Maps to Study the Role of Air–Sea Heat Fluxes in North Atlantic Eighteen Degree Water Formation. *Journal of Physical Oceanography* 39(8)**:** 1818-1835.

Tate, E., S. L. Cutter and M. Berry. 2010. Integrated multihazard mapping. *Environment and Planning B.*

Weckel, M. E., D. Mack, C. Nagy, R. Christie and A. Wincorn. 2010. Using Citizen Science to Map Human–Coyote Interaction in Suburban New York, USA. *Journal of Wildlife Management* 74(5)**:** 1163-1171.

Maps/Map Collections/Map Descriptions

March, G. 2009. Using AutoCAD to Help Relocate a Map Collection: The University of Tennessee Libraries' Experience. *Journal of Map And Geography Libraries* 5(2)**:** 157-173.

Pistocchi, A. and R. Loos. 2009. A Map of European Emissions and Concentrations of PFOS and PFOA. *Environmental Science & Technology* 43(24)**:** 9237-9244.

Schaaik, v., J. G.J. and J. J. van der Kemp. 2009. Real Crimes on Virtual Maps: The Application of Geography and GIS in Criminology. *The GeoJournal Library* 96.

Shafri, H. M., I. M. Zahidi and S. A. Bakar. 2010. Development of landslide susceptibility map utilizing remote sensing and Geographic Information Systems (GIS). *Disaster Prevention and Management* 19(1)**:** 59-69.

Sidlar, C. L. and C. Rinner. 2009. Utility assessment of a map-based online geo-collaboration tool. *Journal of Environmental Management* 90(6)**:** 2020-2026.

Models/Modeling

Abdallah, C. 2010. Spatial distribution of block falls using volumetric GIS-decision-tree models. *ITC Journal*.

Aggett, G. R. and J. P. Wilson. 2009. Creating and coupling a high-resolution DTM with a 1-D hydraulic model in a GIS for scenario-based assessment of avulsion hazard in a gravel-bed river. *Geomorphology* 113(1-2)**:** 21-34.

Alexis, S., L. G. García-Montero, A. J. Hernández, A. García-Abril and J. Pastor. 2010. Soil fertility and GIS raster models for tropical agroforestry planning in economically depressed and contaminated Caribbean areas (coffee and kidney bean plantations). *Agroforestry Systems* 79(3)**:** 381.

Arribas, C. A., C. A. Blazquez and A. Lamas. 2010. Urban solid waste collection system using mathematical modelling and tools of geographic information systems. *Waste Management and Research* 28(4)**:** 355.

Barbosa, M. R., J. C. S. Seoane, M. G. Buratto, L. S. de Oliveira Dias, J. P. C. Raivel and F. L. Martins. 2010. Forest Fire Alert System: a Geo Web GIS prioritization model considering land susceptibility and hotspots - a case study in the Carajas National Forest, Brazilian Amazon. *International Journal of Geographical Information Science* 24(6)**:** 873-901.

Benomar, T. B., G. Hu and F. Bian. 2009. A predictive GIS model for potential mapping of copper, lead, and zinc in Lanping area, China. *Geo-spatial Information Science* 12(4)**:** 243-250.

Chang, L.-C., H.-Y. Shen, Y.-F. Wang, J.-Y. Huang and Y.-T. Lin. 2010. Clustering-based hybrid inundation model for forecasting flood inundation depths. *Journal of Hydrology* 385(1-4)**:** 257-268.

Chierici, F., L. Pignagnoli and D. Embriaco. 2010. Modeling of the hydroacoustic signal and tsunami wave generated by seafloor motion including a porous seabed. *Journal of Geophysical Research. B. Solid Earth* 115(C03).

Crooks, A. T. 2010. Constructing and implementing an agent-based model of residential segregation through vector GIS. *International Journal of Geographical Information Science* 24(5)**:** 661-675.

Edwards, J., B. Lendt, E. Koval and P. Ginther. 2010. GIS and Hydraulic Model Integration Implementing Cost-effective Sustainable Modeling Solutions (Part 1 of 2). *Drinking Water & Backflow Prevention* 27(2)**:** 22-24.

Font, M., D. Amorese and J. L. Lagarde. 2010. DEM and GIS analysis of the stream gradient index to evaluate effects of tectonics: The Normandy intraplate area (NW France). *Geomorphology* 119(3-4)**:** 172.

Harrower, M. J. 2010. Geographic Information Systems (GIS) hydrological modeling in archaeology: an example from the origins of irrigation in Southwest Arabia (Yemen). *Journal of Archaeological Science* 37(7)**:** 1447.

Ju, W., P. Gao, J. Wang, Y. Zhou and X. Zhang. 2010. Combining an ecological model with remote sensing and GIS techniques to monitor soil water content of croplands with a monsoon climate. *Agricultural Water Management* 97(8)**:** 1221.

Kandala, N.-B., L. Fahrmeir, S. Klasen and J. Priebe. 2009. Geo-additive models of childhood undernutrition in three sub-Saharan African countries. *Population, Space and Place* 15(5)**:** 461.

Keshta, N., A. Elshorbagy and L. Barbour. 2010. Comparative probabilistic assessment of the hydrological performance of reconstructed and natural watersheds. *Hydrological Processes* 24(10)**:** 1333-1342.

Konz, M. and J. Seibert. 2010. On the value of glacier mass balances for hydrological model calibration. *Journal of Hydrology* 385(1-4)**:** 238-246.

Kuleli, T. 2010. City-Based Risk Assessment of Sea Level Rise Using Topographic and Census Data for the Turkish Coastal Zone. *Estuaries and Coasts* 33(3)**:** 640-651.

Li, D. 2010. Remotely sensed images and GIS data fusion for automatic change detection. *International Journal of Image and Data Fusion* 1(1)**:** 99-108.

Li, D. and X. Shen. 2010. Geospatial information service based on digital measurable image. *Geo-Spatial Information Science* 13(2)**:** 79-84.

Lim, B. H. and C. S. Ruf. 2009. A High-Resolution Full-Earth Disk Model for Evaluating Synthetic Aperture Passive Microwave Observations From GEO. *IEEE transactions on geoscience and remote sensing* 47(11)**:** 3731.

Maeda, S., T. Kawachi, K. Unami, J. Takeuchi and E. Ichion. 2010. Controlling wasteloads from point and nonpoint sources to river system by GIS-aided Epsilon Robust Optimization model. *Journal of Hydro-environment Research* 4(1)**:** 27-36.

Malekmohammadi, B., B. Zahraie and R. Kerachian. 2010. A real-time operation optimization model for flood management in river-reservoir systems. *Natural Hazards* 53(3)**:** 459-482.

Merz, C., J. Steidl and R. Dannowski. 2009. Parameterization and regionalization of redox based denitrification for GIS-embedded nitrate transport modeling in Pleistocene aquifer systems. *Environmental Geology* 58(7)**:** 1587-1599.

Murray, A. T. 2010. Advances in location modeling: GIS linkages and contributions. *Journal of Geographical Systems*

Nazari Samani, A., H. Ahmadi, A. Mohammadi, J. Ghoddousi, A. Salajegheh, G. Boggs and R. Pishyar. 2010. Factors Controlling Gully Advancement and Models Evaluation (Hableh Rood Basin, Iran). *Water Resources Management* 24(8)**:** 1531-1549.

Ocalir, E. V., O. Y. Ercoskun and R. Tur. 2010. An integrated model of GIS and fuzzy logic (FMOTS) for location decisions of taxicab stands. *Expert Systems with Applications* 37(7)**:** 4892.

Peterson, E. E. and J. M. Ver Hoef. 2010. A mixed-model moving-average approach to geo-statistical modeling in stream networks. *Ecology* 91(3)**:** 644.

Pradhan, B. 2010. Manifestation of an advanced fuzzy logic model coupled with Geo-information techniques to landslide susceptibility mapping and their comparison with logistic regression modeling. *Environmental and Ecological Statistics*

Prasad, R. K., V. S. Singh, S. K. G. Krishnamacharyulu and P. Banerjee. 2010. Application of drastic model and GIS: for assessing vulnerability in hard rock granitic aquifer. *Environmental Monitoring and Assessment* 1.

Richmond, M. C. and W. A. Perkins. 2009. Efficient calculation of dewatered and entrapped areas using hydrodynamic modeling and GIS. *Environmental Modelling & Software* 24(12)**:** 1447-1456.

Sancar, C. 2010. Integration of planning models and GIS in defining urban development areas. *International Journal of Sustainable Development & World Ecology* 17(2)**:** 133-141.

Spadoni, M., M. Brilli, F. Giustini and M. Petitta. 2010. Using GIS for modelling the impact of current climate trend on the recharge area of the S. Susanna Spring (central Apennines, Italy). *Hydrological Processes* 24(1)**:** 50-64.

Tiede, D., S. Lang, F. Albrecht and D. Hölbling. 2010. Object-based class modeling for cadastre-constrained delineation of geo-objects. *Photogrammetric Engineering and Remote Sensing* 76(2)**:** 193.

Tisseuil, C., M. Vrac, S. Lek and A. J. Wade. 2010. Statistical downscaling of river flows. *Journal of Hydrology* 385(1-4)**:** 279-291.

Tombrou, M., E. Bossioli, A. P. Protonotariou, H. Flocas, C. Giannakopoulos and A. Dandou. 2009. Coupling GEOS-CHEM with a regional air pollution model for Greece. *Atmospheric Environment* 43(31)**:** 4793.

Turino, C., P. Morasca, G. Ferretti, D. Scafidi and D. Spallarossa. 2010. Reliability of the automatic procedures for locating earthquakes in southwestern Alps and northern Apennines (Italy). *Journal of Seismology* 14(2)**:** 189-212.

Van Der Knijff, J. M., J. Younis and A. P. J. De Roo. 2010. LISFLOOD: a GIS-based distributed model for river basin scale water balance and flood simulation. *International Journal of Geographical Information Science* 24(2)**:** 189-212.

Vaze, J., J. Teng and G. Spencer. 2010. Impact of DEM accuracy and resolution on topographic indices. *Environmental Modelling & Software* 25(10)**:** 1086-1098.

Venkata, R. K., T. I. Eldho and E. P. Rao. 2009. A Diffusion Wave Based Integrated FEM-GIS Model for Runoff Simulation of Small Watersheds. *Journal of Water Resource and Protection* 1(6).

Ontology/Semantic Web

Huang, Y. and L. Bian. 2010. Ontology-driven tour-planning systems: a conceptual framework. *Environment and Planning B* 37**:** 483-499.

Husain, M. F., T. Al-Khateeb, M. Alam and L. Khan. 2010. Ontology based policy interoperability in geo-spatial domain. *Computer Standards and Interfaces*.

Leszczynski, A. 2009. Rematerializing GIScience. *Environment & Planning D: Society & Space*.

Poore, B. S. 2010. WALL-E and the Many, Many Maps: Toward User-Centred Ontologies for The National Map. *Cartographica*.

Yue, P., J. Gong, L. Di, L. He and Y. Wei. 2009. Integrating semantic web technologies and geospatial catalog services for geospatial information discovery and processing in cyberinfrastructure. *GeoInformatica* October.

Photogrammetry

Dvigalo, V. N. and I. V. Melekestsev. 2009. The geological and geomorphic impact of catastrophic landslides in the Geyser Valley of Kamchatka: Aerial photogrammetry. *Journal of Volcanology and Seismology* 3(5)**:** 314-325.

Ergun, B., C. Sahin, I. Baz and T. Ustuntas. 2010. A case study on the historical peninsula of Istanbul based on three-dimensional modeling by using photogrammetry and terrestrial laser scanning. *Environmental Monitoring & Assessment* 165(1-4)**:** 595-601.

Granshaw, S. I. 2010. Range Photogrammetry: Principles, Methods And Applications. *The Photogrammetric Record* 25(130)**:** 203-204.

Jazayeri, I. and C. S. Fraser. 2010. Interest operators for feature-based matching in close range Photogrammetry. *The Photogrammetric Record* 25(129)**:** 24-41.

Koelman, H. J. 2010. Application of a photogrammetry-based system to measure and re-engineer ship hulls and ship parts: An industrial practices-based report. *CAD Computer Aided Design* 42(8)**:** 731.

Lerma, J. L., S. Navarro, M. Cabrelles and V. Villaverde. 2010. Terrestrial laser scanning and close range photogrammetry for 3D archaeological documentation: the Upper Palaeolithic Cave of Parpalló as a case study. *Journal of Archaeological Science* 37(3)**:** 499.

Marzolff, I. and J. Poesen. 2009. The potential of 3D gully monitoring with GIS using high-resolution aerial photography and a digital photogrammetry system. *Geomorphology* 111(1-2)**:** 48-60.

. 2009. Photogrammetry and augmented reality for cultural heritage applications. *The Photogrammetric Record* 24(128)**:** 316-331.

Rowe, L. E., R. J. C. Currey, S. M. Dawson and D. Johnson. 2010. Assessment of epidermal condition and calf size of Fiordland bottlenose dolphin Tursiops truncatus populations using dorsal fin photographs and Photogrammetry. *Endangered Species Research* 11(1)**:** 83.

. 2009. Applications of low-budget photogrammetry in the geotechnical laboratory. *The Photogrammetric Record* 24(128)**:** 332-350.

Thomson, G. H. 2010. The Practical Effect of a Diffraction-Limited Image for Photogrammetry. *The Photogrammetric Record* 25(130)**:** 197-200.

Webster, T., S. Dawson and E. Slooten. 2010. A simple laser photogrammetry technique for measuring Hector's dolphins (Cephalorhynchus hectori) in the field. *Marine Mammal Science* 26(2)**:** 296-308.

Xiao, Z., J. Liang, D. Yu, Z. Tang and A. Asundi. 2010. An accurate stereo vision system using cross-shaped target self-calibration method based on Photogrammetry. *Optics and Lasers in Engineering*.

Yilmaztürk, F., S. Kulur and N. Terzi. 2010. Measurement of deflections in buried flexible pipes by close range digital Photogrammetry. *Measurement: Journal of the International Measurement Confederation* 43(6)**:** 857.

Zhang, Y., L. Wu, L. Lin and J. Zhao. 2010. Condition numbers for evaluation of ill-posed problems in Photogrammetry. *Wuhan Daxue Xuebao (Xinxi Kexue Ban) [Geomatics and Information Science of Wuhan University]* 35(3)**:** 308.

Zújar, O., L. Borgniet, A. M. P. Romero and J. F. Loder. 2009. Monitoring morphological changes along the coast of Huelva (SW Spain) using soft-copy photogrammetry and GIS. *Journal of Coastal Conservation* 8(1).

Projections

Roggero, M. 2009. Laborde projection in Madagascar cartography and its recovery in WGS84 datum. *Applied Geomatics* 1(4).

Rus, I., C. Balint, V. Craciunescu, S. Constantinescu, I. Ovejanu and Z. Bartos-Elekes. 2010. Automated georeference of the 1:20 000 Romanian maps under Lambert-Cholesky (1916-1959) projection system. *Acta Geodaetica et Geophysica Hungarica* 45(1)**:** 105.

Zhao, H., L. Li and J. Gong. 2010. Universal map projection selection. *Wuhan Daxue Xuebao (Xinxi Kexue Ban) [Geomatics and Information Science of Wuhan University]* 35(2)**:** 244.

Remote Sensing

Adam, E., O. Mutanga and D. Rugege. 2010. Multispectral and hyperspectral remote sensing for identification and mapping of wetland vegetation: a review. *Wetlands Ecology and Management* 18(3)**:** 281-296.

Barnolas, M., T. Rigo and M. C. Llasat. 2010. Characteristics of 2-D convective structures in Catalonia (NE Spain): an analysis using radar data and GIS. *Hydrology and Earth System Sciences* 14(1)**:** 129-139.

Castano, S., D. Sanz and J. J. Gomez-Alday. 2010. Methodology for Quantifying Groundwater Abstractions for Agriculture via Remote Sensing and GIS. *Water Resources Management* 24(4)**:** 795-814.

Chuvieco, E., I. Aguado, M. Yebra, H. Nieto, J. Salas, M. P. Martín, L. Vilar, J. Martínez, S. Martín, P. Ibarra, J. de la Riva, J. Baeza, F. Rodríguez, J. R. Molina, M. A. Herrera and R. Zamora. 2010. Development of a framework for fire risk assessment using remote sensing and geographic information system technologies. *Ecological Modelling* 221(1)**:** 46.

Emadi, M., M. Baghernejad, M. Pakparvar and S. A. Kowsar. 2010. An approach for land suitability evaluation using geostatistics, remote sensing, and geographic information system in arid and semiarid ecosystems. *Environmental Monitoring & Assessment* 164(1-4)**:** 501-511.

Gontia, N. K. and K. N. Tiwari. 2010. Estimation of Crop Coefficient and Evapotranspiration of Wheat (Triticum aestivum) in an Irrigation Command Using Remote Sensing and GIS. *Water Resources Management* 24(7)**:** 1399-1414.

Kanth, T. A. and Z. U. Hassan. 2010. Assessment of land use /land cover change in wular catchment using remote sensing and GIS. *Transactions of the Institute of Indian Geographers* 32(1)**:** 53.

Mallinis, G., F. Maris, I. Kalinderis and N. Koutsias. 2009. Assessment of post-fire soil erosion risk in the fire-affected watersheds using remote sensing and GIS. *GIScience & Remote Sensing* 46(4)**:** 388-410.

Muthuwatta, L. P., M.-u.-D. Ahmad, M. G. Bos and T. H. M. Rientjes. 2010. Assessment of Water Availability and Consumption in the Karkheh River Basin, Iran-Using Remote Sensing and Geo-statistics. *Water Resources Management* 24(3)**:** 459-484.

Poulos, H. M. 2009. Mapping fuels in the Chihuahuan Desert borderlands using remote sensing, geographic information systems, and biophysical modeling. *Canadian Journal of Forest Research* 39(10)**:** 1917-1927.

Siart, C., O. Bubenzer and B. Eitel. 2009. Combining digital elevation data (SRTM/ASTER), high-resolution satellite imagery (Quickbird) and GIS for geomorphological mapping; a multi-component case study on Mediterranean karst in central Crete. *Geomorphology* 112(1-2)**:** 106-121.

Singh, G., D. S. Bundela, M. Sethi, K. Lal and S. K. Kamra. 2010. Remote sensing and geographic information system for appraisal of salt-affected soils in India. *Journal of Environmental Quality* 39(1)**:** 5-15.

Sultana, M. S., G. M. T. Islam and Z. Islam. 2009. Pre- and Post-Urban Wetland Area in Dhaka City, Bangladesh: A Remote Sensing and GIS Analysis. *Journal of Water Resource and Protection* 1(6).

Yu, G., Q. Zeng, S. Yang, L. Hu, X. Lin, Y. Che and Y. Zheng. 2010. On the intensity and type transition of land use at the basin scale using RS/GIS: a case study of the Hanjiang River Basin. *Environmental Monitoring and Assessment* 160(1-4)**:** 169-179.

Urban Systems

Arribas, C., C. Blazquez and A. Lamas. 2010. Urban solid waste collection system using mathematical modelling and tools of geographic information systems. *Waste Management and Research* 28(4)**:** 355-363.

Cappelle, C., M. E. B. E. Najjar, D. Pomorski and F. Charpillet. 2010. Intelligent Geolocalization in Urban Areas Using Global Positioning Systems, Three-Dimensional Geographic Information Systems, and Vision. *Journal of Intelligent Transportation Systems* 14(1)**:** 3-12.

Fagan, J. E., M. A. Reuter and K. J. Langford. 2010. Dynamic performance metrics to assess sustainability and cost effectiveness of integrated urban water systems. *Resources, Conservation & Recycling* 54(10)**:** 719-736.

Girardin, L., F. Marechal, M. Dubuis, N. Calame-Darbellay and D. Favrat. 2010. EnerGis: A geographical information based system for the evaluation of integrated energy conversion systems in urban areas. *Energy* 35(2)**:** 830.

Jo, J. H., J. S. Golden and S. W. Shin. 2009. Incorporating built environment factors into climate change mitigation strategies for Seoul, South Korea: A sustainable urban systems framework. *Habitat International* 33(3)**:** 267-275.

Livesley, S. J., B. J. Dougherty, A. J. Smith, D. Navaud, L. J. Wylie and S. K. Arndt. 2010. Soil-atmosphere exchange of carbon dioxide, methane and nitrous oxide in urban garden systems: impact of irrigation, fertiliser and mulch. *Urban Ecosystems* January.

Lopes, F. A., P. Morin, R. Oliveira and L. F. Melo. 2009. Impact of biofilms in simulated drinking water and urban heat supply systems. *International Journal of Environmental Engineering* 1(3)**:** 276-294.

Mahgoub, M. E.-S. M., N. P. van der Steen, K. Abu-Zeid and K. Vairavamoorthy. 2010. Towards sustainability in urban water: a life cycle analysis of the urban water system of Alexandria City, Egypt. *Journal of Cleaner Production* 18(10-11)**:** 1100.

Mbabazi, J., J. Wasswa, J. Kwetegyeka and G. K. Bakyaita. 2010. Heavy metal contamination in vegetables cultivated on a major Urban wetland inlet drainage system of Lake Victoria, Uganda. *International Journal of Environmental Studies* 67(3)**:** 333.

Mollah, K. A. and T. Aramaki. 2010. Social-epidemiological study for evaluation of water supply and sanitation systems of low-income urban community in Dhaka, Bangladesh. *Journal of Water and Health* 8(1)**:** 184-191.

Nancarrow, B., N. Porter and Z. Leviston. 2010. Predicting community acceptability of alternative urban water supply systems: A decision making model. *Urban Water Journal* 7(3)**:** 197-210.

Nichol, J. E., M. S. Wong and J. Wang. 2010. A 3D aerosol and visibility information system for urban areas using remote sensing and GIS. *Atmospheric Environment* 44(21-22)**:** 2501.

Nie, L., O. Lindholm, G. Lindholm and E. Syversen. 2009. Impacts of climate change on urban drainage systems - a case study in Fredrikstad, Norway. *Urban Water Journal* 6(4)**:** 323-332.

Nunez, M., J. Oliver-Sola, J. Rieradevall and X. Gabarrell. 2010. Water Management in Integrated Service Systems: Accounting for Water Flows in Urban Areas. *Water Resources Management* 24(8)**:** 1583-1604.

Park, C., G. W. Schade and I. Boedeker. 2010. Flux measurements of volatile organic compounds by the relaxed eddy accumulation method combined with a GC-FID system in urban Houston, Texas. *Atmospheric Environment* 44(21-22)**:** 2605.

Schimmer, B., R. Ter Schegget, M. Wegdam, L. Züchner, A. de Bruin, P. M. Schneeberger, T. Veenstra, P. Vellema and W. van der Hoek. 2010. The use of a geographic information system to identify a dairy goat farm as the most likely source of an urban Q-fever outbreak. *BMC infectious diseases* 10(69).

Schwarz, N., D. Haase and R. Seppelt. 2010. Omnipresent sprawl? A review of urban simulation models with respect to urban shrinkage. *Environment and Planning B* 37**:** 265-283.

Shi, W. and Y. Liu. 2010. Real-time urban traffic monitoring with global positioning system-equipped vehicles. *IET Intelligent Transport Systems* 4(2)**:** 113.

Tota-Maharaj, K., P. Grabowiecki and M. Scholz. 2009. Energy and temperature performance analysis of geothermal (ground source) heat pumps integrated with permeable pavement systems for urban run-off reuse. *International Journal of Sustainable Engineering* 2(3)**:** 201-213.

Vermonden, K., M. A. A. Hermus, M. van Weperen, R. S. E. W. Leuven, G. van der Velde, A. J. P. Smolders, J. G. M. Roelofs and A. J. Hendriks. 2009. Does upward seepage of river water and storm water runoff determine water quality of urban drainage systems in lowland areas? A case study for the Rhine-Meuse delta. *Hydrological Processes* 23(21)**:** 3110-3120.

Wu, F. 2009. Modelling urban development with geographical information systems and cellular automata. *Environment & Planning B: Planning & Design* 36(6)**:** 1129-1130.

Yuan, F. 2010. Urban growth monitoring and projection using remote sensing and geographic information systems: a case study in the Twin Cities Metropolitan Area, Minnesota. *Geocarto International* 25(3)**:** 213-230.

Visualization

Arthur, D. K., S. Lasher-Trapp, A. Abdel-Haleem, N. Klosterman and D. S. Ebert. 2010. A New Three-Dimensional Visualization System for Combining Aircraft and Radar Data and Its Application to RICO Observations. *Journal of Atmospheric and Oceanic Technology* 27(5)**:** 811-828.

Best, J., S. Simmons, D. Parsons, K. Oberg, J. Czuba and C. Malzone. 2010. A new methodology for the quantitative visualization of coherent flow structures in alluvial channels using multibeam echo-sounding (MBES). *Geophysical Research Letters* 37(06).

Birt, A. G., W. Xi, R. N. Coulson and A. G. Birt. 2009. LANDISVIEW: A visualization tool for landscape modelling. *Environmental Modelling & Software* 24(11)**:** 1339-1341.

Boller, R. A., S. A. Braun and D. H. Laidlaw. 2010. Application of uncertainty visualization methods to meteorological trajectories. *Earth Science Informatics* 3(1-2)**:** 119-126.

Chiang, G. T., O. H. White and M. T. Dove. 2009. Geospatial visualization tool kit for scientists using Fortran. *Eos, Transactions, American Geophysical Union* 90(29)**:** 249-250.

Cooper, J. W., David; Oskrochi, Reza 2010. Fractal analysis and perception of visual quality in everyday street vistas. *Environment and Planning B.*

Dobbins, J. P. and M. Abkowitz. 2010. Use of Advanced Information Technologies for Marine Accident Data Analysis Visualization and Quality Control. *Journal of Transportation Safety & Security* 2(1)**:** 1-13.

Gao, C. and C. Zhang. 2010. A Novel Method for Visualization of Clustering Results. *Communications in Statistics - Simulation and Computation* 39(5)**:** 1049-1056.

Gimesi, L. 2009. Development of a visualization method suitable to present tendencies of changes in precipitation. *Journal of Hydrology* 377(1-2)**:** 185-190.

Jones, R. R., S. Kokkalas and K. J. W. McCaffrey. 2009. Quantitative analysis and visualization of nonplanar fault surfaces using terrestrial laser scanning (LIDAR); the Arkitsa Fault, Central Greece, as a case study. *Geosphere* 5(6)**:** 465-482.

Jylhä, K., H. Tuomenvirta, K. Ruosteenoja, H. Niemi-Hugaerts, K. Keisu and J. A. Karhu. 2010. Observed and Projected Future Shifts of Climatic Zones in Europe and Their Use to Visualize Climate Change Information. *Weather, Climate, and Society* 2(2)**:** 148-167.

Ladstädter, F., A. K. Steiner, B. C. Lackner, B. Pirscher, G. Kirchengast, J. Kehrer, H. Hauser, P. Muigg and H. Doleisch. 2010. Exploration of Climate Data Using Interactive Visualization. *Journal of Atmospheric and Oceanic Technology* 27(4)**:** 667-679.

Lee, M., W. Kim, J. S. Hong and S. Park. 2010. Semantic association-based search and visualization method on the semantic web portal. *International Journal of Computer Networks & Communications* 2(1)**:** 140-152.

Li, B., W. Zheng and H.-C. Zhao. 2010. Key Technologies of 3D Visualization on Water Pollution Diffusing Model. *Jisuanji Gongcheng (Computer Engineering)* 36(8)**:** 251-253, 257.

Li, D., M. Wang, Q. Hu and F. Hu. 2009. On three-dimensional visualization of geospatial information: graphics based or imagery based? *Annals of GIS* 15(2)**:** 75-84.

Madhani, J. T., J. Young, N. A. Kelson and R. J. Brown. 2009. A Novel Method to Capture and Analyze Flow in a Gross Pollutant Trap Using Image-Based Vector Visualization. *Water, Air, & Soil Pollution: Focus* 9(5-6)**:** 357-369.

Morozov, I., G. Chubak and S. Blyth. 2009. Interactive 3D/2D visualization for geophysical data processing and interpretation. *Computers & Geosciences* 35(7)**:** 1397-1408.

Nury, S. N., Z. Xuan, I. Cartwright and L. Ailleres. 2010. Aquifer visualization for sustainable water management. *Management of Environmental Quality: An International Journal* 21(2)**:** 253-274.

Olsen, K. B. and G. Ely. 2009. WebSims; a Web-based system for storage, visualization, and dissemination of earthquake ground-motion simulations. *Seismological Research Letters* 80(6)**:** 1002-1007.

Robaina, D. T., M. Kischinhevsky, S. L. G. de Oliveira, D. N. Brandão, E. Clua and A. Montenegro. 2010. An adaptive graph for volumetric mesh visualization. *Procedia Computer Science* 1(1)**:** 1741.

Rübel, O., S. Ahern, E. W. Bethel, M. D. Biggin, H. Childs, E. Cormier-Michel, A. DePace, M. B. Eisen, C. C. Fowlkes, C. G. R. Geddes, H. Hagen, B. Hamann, M.-Y. Huang, S. V. E. Keränen, D. W. Knowles, C. L. L. Hendriks, J. Malik, J. Meredith, P. Messmer, D. Ushizima, G. H. Weber and K. Wu. 2010. Coupling visualization and data analysis for knowledge discovery from multi-dimensional scientific data. *Procedia Computer Science* 1(1)**:** 1751.

Sester, M. and C. Brenner. 2009. A vocabulary for a multiscale process description for fast transmission and continuous visualization of spatial data. *Computers & Geosciences* 35(11)**:** 2177-2184.

Song, Y. and J. Shan. 2010. Color correction of texture images for true photorealistic visualization. *ISPRS Journal of Photogrammetry and Remote Sensing* 65(3)**:** 308.

Teufelsbauer, H. 2009. Linking laser scanning to snowpack modeling; data processing and visualization. *Computers & Geosciences* 35(7)**:** 1481-1490.

Thogmartin, W. E. 2010. Color Blindness and Visualizing Georeferenced Data in Mapped Products: We Can Do More. *The Auk* 57(4)**:** 242-254.

Titus, S. and E. Horsman. 2009. Characterizing and improving spatial visualization skills. *Journal of Geoscience Education* 57(4)**:** 242-254.

Wu, H., Z. He and J. Gong. 2010. A virtual globe-based 3D visualization and interactive framework for public participation in urban planning processes. *Computers, Environment and Urban Systems* 34(4)**:** 291.

Zeitoun, D. G. and T. Dana-Picard. 2010. Accurate visualization of graphs of functions of two real variables. *International Journal of Computational and Mathematical Sciences* 4(1)**:** 1.

Zhang, C., Y. Tang, L. Luo and W. Xu. 2009. Outlier identification and visualization for Pb concentrations in urban soils and its implications for identification of potential contaminated land. *Environmental Pollution* 157(11)**:** 3083-3090.