GEOGG065: Environmental GIS

View Online

Baily, Brian, and David Nowell. 1996. 'Techniques for Monitoring Coastal Change: A Review and Case Study'. Ocean & Coastal Management 32 (2): 85–95. https://doi.org/10.1016/S0964-5691(96)00058-0.

Band, Lawrence E. n.d. 'Topographic Partition of Watersheds with Digital Elevation Models'. Water Resources Research 22 (1): 15–24. https://doi.org/10.1029/WR022i001p00015.

Barfoot, P.J., and J.J. Tucker. 1980. 'Geomorphological Changes at Blakeney Point'. Transactions of the Norfolk and Norwich Naturalists Society 25 (2): 49–60.

Bernhardsen, Tor. 1999. Geographic Information Systems: An Introduction. 2nd ed. Wiley.

Bock, Michael. 2003. 'Remote Sensing and GIS-Based Techniques for the Classification and Monitoring of Biotopes: Case Examples for a Wet Grass- and Moor Land Area in Northern Germany'. Journal for Nature Conservation 11 (3): 145–55. https://doi.org/10.1078/1617-1381-00050.

Boteva, Dimitrina, Geoffrey Griffiths, and Panayotis Dimopoulos. n.d. 'Evaluation and Mapping of the Conservation Significance of Habitats Using GIS: An Example from Crete, Greece'. Journal for Nature Conservation 12 (4): 237–50. https://doi.org/10.1016/j.jnc.2004.09.002.

Brewer, Cynthia A. 2005. Designing Better Maps: A Guide for GIS Users. ESRI Press.

Burningham, H. 2002. 'Meso-Scale Morphological Changes in the Loughros More Estuary'. Proceedings of Littoral 2002: The Changing Coast, Friends of Sheskinmore. http://sheskinmore.wordpress.com/research/.

Carmona, Carlos P., Achim Röder, Francisco M. Azcárate, and Begoña Peco. n.d. 'Grazing Management or Physiography? Factors Controlling Vegetation Recovery in Mediterranean Grasslands'. Ecological Modelling 251: 73–84. https://doi.org/10.1016/j.ecolmodel.2012.12.005.

Chaaban, F., and et al. 2012. 'Using ArcGISH Modelbuilder and Aerial Photographs to Measure Coastline Retreat and Advance: North of France'. Journal of Coastal Research 28 (6): 1567–79. http://www.bioone.org/doi/abs/10.2112/JCOASTRES-D-11-00054.1.

Chen, Chien-Yuan, and Fan-Chieh Yu. n.d. 'Morphometric Analysis of Debris Flows and Their Source Areas Using GIS'. Geomorphology 129 (3–4): 387–97. https://doi.org/10.1016/j.geomorph.2011.03.002.

Dalton, Tracey, Robert Thompson, and Di Jin. n.d. 'Mapping Human Dimensions in Marine Spatial Planning and Management: An Example from Narragansett Bay, Rhode Island'. Marine Policy 34 (2): 309–19. https://doi.org/10.1016/j.marpol.2009.08.001.

Dartnell, Peter, and et al. 2008. 'Multibeam Sonar Mapping and Modeling of a Submerged Bryophyte Mat in Crater Lake, Oregon'. US Geological Survey Data Series 366. http://pubs.usgs.gov/ds/366/.

DeMers, Michael N. 2009. Fundamentals of Geographic Information Systems. 4th ed. Wiley.

Dong, Zhibao, Xunming Wang, and Guangting Chen. n.d. 'Monitoring Sand Dune Advance in the Taklimakan Desert'. Geomorphology 35 (3–4): 219–31. https://doi.org/10.1016/S0169-555X(00)00039-8.

Draper, D., and et al. n.d. 'Application of GIS in Plant Conservation Programmes in Portugal'. Biological Conservation 113 (3): 337–49. https://doi.org/10.1016/S0006-3207(03)00125-3.

Duane Nellis, M., John A. Harrington, and Jaiping Wu. n.d. 'Remote Sensing of Temporal and Spatial Variations in Pool Size, Suspended Sediment, Turbidity, and Secchi Depth in Tuttle Creek Reservoir, Kansas: 1993'. Geomorphology 21 (3–4): 281–93. https://doi.org/10.1016/S0169-555X(97)00067-6.

Ekebom, Jan, and Anne Erkkila. n.d. 'Using Aerial Photography for Identification of Marine and Coastal Habitats under the EU's Habitats Directive'. Aquatic Conservation: Marine and Freshwater Ecosystems 13 (4): 287–304. https://doi.org/10.1002/aqc.553.

Estes, John E. 1966. Some Applications of Aerial Infrared Imagery. Allen Press Inc.

Fromard, F., C. Vega, and C. Proisy. n.d. 'Half a Century of Dynamic Coastal Change Affecting Mangrove Shorelines of French Guiana. A Case Study Based on Remote Sensing Data Analyses and Field Surveys'. Marine Geology 208 (2–4): 265–80. https://doi.org/10.1016/j.margeo.2004.04.018.

Greco, Steven E., and Richard E. Plant. n.d. 'Temporal Mapping of Riparian Landscape Change on the Sacramento River, Miles 196–218, California, USA'. Landscape Research 28 (4): 405–26. https://doi.org/10.1080/0142639032000150149.

Hall, S.T., and C.J. Post. 2008. 'Advanced GIS Exercise: Estimating Beach and Dune Erosion in Coastal South Carolina'. Journal of Natural Resources and Life Sciences Education 37: 49–52.

Heywood, Ian, Sarah Cornelius, and Steve Carver. 2006. An Introduction to Geographical Information Systems. 3rd ed. Pearson Education.

Kadmon, Ronen, and Ruthie Harari-Kremer. n.d. 'Studying Long-Term Vegetation Dynamics Using Digital Processing of Historical Aerial Photographs'. Remote Sensing of Environment 68 (2): 164–76. https://doi.org/10.1016/S0034-4257(98)00109-6.

Kienzle, Stefan. n.d. 'The Effect of DEM Raster Resolution on First Order, Second Order and Compound Terrain Derivatives'. Transactions in GIS 8 (1): 83–111.

https://doi.org/10.1111/j.1467-9671.2004.00169.x.

Koch, Tom. 2004. 'The Map as Intent: Variations on the Theme of John Snow'. In Cartographica, vol. 39. no. 4. http://www.ph.ucla.edu/epi/snow/cartographica39(4)1_14_2004.pdf.

Leeks, G.J.L., and et al. n.d. 'The LOIS River Monitoring Network: Strategy and Implementation'. Science of The Total Environment 194–195: 101–9. https://doi.org/10.1016/S0048-9697(96)05356-9.

Leonard, Paul B., and et al. n.d. 'Remote Detection of Small Wetlands in the Atlantic Coastal Plain of North America: Local Relief Models, Ground Validation, and High-Throughput Computing'. Forest Ecology and Management 284: 107–15. https://doi.org/10.1016/j.foreco.2012.07.034.

Letsinger, Sally L. 2004. 'Evaluation of Riparian Buffer Zones Using GIS and Remote Sensing to Target Watershed Restoration Efforts'. Indiana Geological Survey. http://igs.indiana.edu/WatershedHydrology/RiparianBuffers.cfm.

Longley, Paul, and et al. 2011. Geographic Information Systems & Science. 3rd ed. John Wiley & Sons.

Lundblad, Emily R., and et al. 2006. 'A Benthic Terrain Classification Scheme for American Samoa'. Marine Geodesy 29 (2): 89–111. https://doi.org/10.1080/01490410600738021.

Maddrell, Roger J. n.d. 'Managed Coastal Retreat, Reducing Flood Risks and Protection Costs, Dungeness Nuclear Power Station, UK'. Coastal Engineering 28 (1–4): 1–15. https://doi.org/10.1016/0378-3839(95)00035-6.

Manson, F.J., N.R. Loneragan, and S.R. Phinn. n.d. 'Spatial and Temporal Variation in Distribution of Mangroves in Moreton Bay, Subtropical Australia: A Comparison of Pattern Metrics and Change Detection Analyses Based on Aerial Photographs'. Estuarine, Coastal and Shelf Science 57 (4): 653–66. https://doi.org/10.1016/S0272-7714(02)00405-5.

McGregor, Stephen J. n.d. 'An Integrated Geographic Information System Approach for Modeling the Suitability of Conifer Habitat in an Alpine Environment'. Geomorphology 21 (3–4): 265–80. https://doi.org/10.1016/S0169-555X(97)00066-4.

McKenna et al., John. 2003. 'Obsolete Maps and Coastal Management: Case Studies from Northwest Ireland'. Coastal Management 31 (3): 229–46. http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=bth&AN=9930623&site=ehost-live&scope=site.

Meulen, F. van der, J.V. Witter, and S.M. Arens. n.d. 'The Use of a GIS in Assessing the Impacts of Sea Level Rise on Nature Conservation along the Dutch Coast: 1990–2090'. Landscape Ecology 6 (1–2): 105–13. https://doi.org/10.1007/BF00157750.

Miller, Scott N., and et al. n.d. 'The Automated Geospatial Watershed Assessment Tool'. Environmental Modelling & Software 22 (3): 365–77. https://doi.org/10.1016/j.envsoft.2005.12.004.

Moore, T., and et al. n.d. 'An Expert System for Integrated Coastal Zone Management: A

Geomorphological Case Study'. Marine Pollution Bulletin 37 (3–7): 361–70. https://doi.org/10.1016/S0025-326X(99)00129-0.

Naito, Adam T., and David M. Cairns. n.d. 'Relationships between Arctic Shrub Dynamics and Topographically Derived Hydrologic Characteristics'. Environmental Research Letters 6 (4). https://doi.org/10.1088/1748-9326/6/4/045506.

Nams, Vilis O., Garth Mowat, and Michael A. Panian. n.d. 'Determining the Spatial Scale for Conservation Purposes – an Example with Grizzly Bears'. Biological Conservation 128 (1): 109–19. https://doi.org/10.1016/j.biocon.2005.09.020.

Neilson, Brigitte, and Mark J. Costello. n.d. 'The Relative Lengths of Seashore Substrata Around the Coastline of Ireland as Determined by Digital Methods in a Geographical Information System'. Estuarine, Coastal and Shelf Science 49 (4): 501–8. https://doi.org/10.1006/ecss.1999.0507.

Pedersen, Åshild Ønvik, Signe Nyhuus, Terje Blindheim, and Ola M.Wergeland Krog. n.d. 'Implementation of a GIS-Based Management Tool for Conservation of Biodiversity within the Municipality of Oslo, Norway'. Landscape and Urban Planning 68 (4): 429–38. https://doi.org/10.1016/S0169-2046(03)00148-8.

Perotto-Baldiviezo, H.L., and et al. n.d. 'GIS-Based Spatial Analysis and Modeling for Landslide Hazard Assessment in Steeplands, Southern Honduras'. Agriculture, Ecosystems & Environment 103 (1): 165–76. https://doi.org/10.1016/j.agee.2003.10.011.

Rozo, Max G., Afonso C.R. Nogueira, and Werner Truckenbrodt. n.d. 'The Anastomosing Pattern and the Extensively Distributed Scroll Bars in the Middle Amazon River'. Earth Surface Processes and Landforms 37 (14): 1471–88. https://doi.org/10.1002/esp.3249.

Rumsby, Barbara. n.d. 'Vertical Accretion Rates in Fluvial Systems: -a Comparison of Volumetric and Depth-Based Estimates'. Earth Surface Processes and Landforms 25 (6): 617–31. https://doi.org/10.1002/1096-9837(200006)25:6<617::AID-ESP99>3.0.CO;2-Z.

Rumsby, Barbara T., and Mark G. Macklin. n.d. 'Channel and Floodplain Response to Recent Abrupt Climate Change: The Tyne Basin, Northern England'. Earth Surface Processes and Landforms 19 (6): 499–515. https://doi.org/10.1002/esp.3290190603.

Salem, B.B. n.d. 'Application of GIS to Biodiversity Monitoring'. Journal of Arid Environments 54 (1): 91–114. https://doi.org/10.1006/jare.2001.0887.

Sear, D.A., and M.D. Newson. n.d. 'Environmental Change in River Channels: A Neglected Element. Towards Geomorphological Typologies, Standards and Monitoring'. Science of The Total Environment 310 (1–3): 17–23. https://doi.org/10.1016/S0048-9697(02)00619-8.

Sheppard, C.R.C., and et al. n.d. 'Habitat Mapping in the Caribbean for Management and Conservation: Use and Assessment of Aerial Photography'. Aquatic Conservation: Marine and Freshwater Ecosystems 5 (4): 277–98. https://doi.org/10.1002/aqc.3270050404.

Smith, Michael de, Paul Longley, and Mike Goodchild. 2021. 'Geospatial Analysis'. 6th edn. https://www.spatialanalysisonline.com/HTML/index.html.

Sørensen, R., U. Zinko, and J. Seibert. n.d. 'On the Calculation of the Topographic Wetness Index: Evaluation of Different Methods Based on Field Observations'. Hydrology and Earth System Sciences 10 (1): 101–12. https://doi.org/10.5194/hess-10-101-2006.

Sutherland, James. n.d. 'Error Analysis of Ordnance Survey Map Tidelines, UK'. Proceedings of the ICE - Maritime Engineering 165 (4): 189–97. https://doi.org/10.1680/maen.2011.10.

Tarboton, David G., Rafael L. Bras, and Ignacio Rodriguez-Iturbe. n.d. 'On the Extraction of Channel Networks from Digital Elevation Data'. Hydrological Processes 5 (1): 81–100. https://doi.org/10.1002/hyp.3360050107.

Taylor, J.C., T.R. Brewer, and A.C. Bird. n.d. 'Monitoring Landscape Change in the National Parks of England and Wales Using Aerial Photo Interpretation and GIS'. International Journal of Remote Sensing 21 (13–14): 2737–52. https://doi.org/10.1080/01431160050110269.

Teng, Jin, Jai Vaze, Narendra K. Tuteja, and John C. Gallant. n.d. 'A GIS-Based Tool for Spatial and Distributed Hydrological Modelling: CLASS Spatial Analyst'. Transactions in GIS 12 (2): 209–25. https://doi.org/10.1111/j.1467-9671.2008.01096.x.

Thompson, S., and et al. n.d. 'Identifying Potential Breeding Sites for the Stone Curlew (Burhinus Oedicnemus) in the UK'. Journal for Nature Conservation 12 (4): 229–35. https://doi.org/10.1016/j.jnc.2004.07.002.

Thorbjarnarson, John, and et al. n.d. 'Regional Habitat Conservation Priorities for the American Crocodile'. Biological Conservation 128 (1): 25–36. https://doi.org/10.1016/j.biocon.2005.09.013.

Vitek, John D., John R. Giardino, and Jeffrey W. Fitzgerald. n.d. 'Mapping Geomorphology: A Journey from Paper Maps, through Computer Mapping to GIS and Virtual Reality'. Geomorphology 16 (3): 233–49. https://doi.org/10.1016/S0169-555X(96)80003-1.

Walsh, Stephen J., David R. Butler, and George P. Malanson. n.d. 'An Overview of Scale, Pattern, Process Relationships in Geomorphology: A Remote Sensing and GIS Perspective'. Geomorphology 21 (3–4): 183–205. https://doi.org/10.1016/S0169-555X(97)00057-3.

White, Kevin, and Hesham M. El Asmar. n.d. 'Monitoring Changing Position of Coastlines Using Thematic Mapper Imagery, an Example from the Nile Delta'. Geomorphology 29 (1–2): 93–105. https://doi.org/10.1016/S0169-555X(99)00008-2.

Wilson, Margaret F.J., and et al. n.d. 'Multiscale Terrain Analysis of Multibeam Bathymetry Data for Habitat Mapping on the Continental Slope'. Marine Geodesy 30 (1–2): 3–35. https://doi.org/10.1080/01490410701295962.

Wright, Dawn J., and William D. Heyman. n.d. 'Introduction to the Special Issue: Marine and Coastal GIS for Geomorphology, Habitat Mapping, and Marine Reserves'. Marine Geodesy 31 (4): 223–30. https://doi.org/10.1080/01490410802466306.