Daniel Buscombe

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Contact Information

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Education

Ph.D. (2008), Coastal Geomorphology/Nearshore Oceanography, University of Plymouth, Plymouth, UK. *Morphodynamics, Sediment Dynamics and Sedimentation of a Gravel Beach.* Advisor: Prof. Gerhard Masselink.

BSc (Hons), 1st class (2003), Physical Geography with Minors in Environemntal Sciences and Biology, Lancaster University, Lancaster, UK. *Morphodynamics of a Ridge-and-Runnel System on a Macrotidal Beach.* Advisor: Dr Suzanna Ilic.

Employment History

November 2012 – present. *Research Geologist, Grand Canyon Monitoring and Research Center, U.S. Geological Survey, Flagstaff, AZ, USA.*

October 2009 – November 2012. *Post-doctoral Research Fellow, School of Marine Science & Engineering, University of Plymouth, UK.*

September, 2008 – 2011. *Computer Programming Contractor, Marine Biology & Ecology Research Centre, University of Plymouth, UK.*

October, 2008 – October 2009. *Post-doctoral Research Scholar, United States Geological Survey, Santa Cruz, California, USA.*

June, 2008 – September, 2008. *Research Assistant, School of Geography, University of Plymouth, UK.*

December, 2007 – April, 2008. *Research Assistant, School of Earth, Ocean & Environmental Science, University of Plymouth, UK.*

October, 2004 – July 2008. *Associate Lecturer and Demonstrator (part-time), School of Geography, University of Plymouth, UK.*

August 2003 - September, 2004. *Assistant tutor, Field Studies Council, Castle Head, Grange-over-Sands, UK.*

Ten Selected Publications

1 **Buscombe, D.**, and Masselink, G. (2006) Concepts in Gravel Beach Dynamics. *Earth Science Reviews* 79, 33-52.
2 Masselink, G., **Buscombe, D.**, Austin, M.J, O'Hare, T., Russell, P. (2008) Sediment Trend Models Fail to Reproduce Small Scale Sediment Transport Patterns on an Intertidal Beach. *Sedimentology* 55, 667-687.
3 Austin, M.J., and **Buscombe, D.** (2008) Morphological Change and Sediment Dynamics of the Beach Step on a Macrotidal Gravel Beach. *Marine Geology* 249, 167-183.
4 **Buscombe, D.**, Rubin, D.M., and Warrick, J.A. (2010) Universal Approximation of Grain Size from Images of Non-Cohesive Sediment. *Journal of Geophysical Research - Earth Surface* 115, F02015.
5 Williams, J.J., **Buscombe, D.**, Masselink, G., Turner, I., and Swinkels, C. (2012) Barrier Dynamics Experiment (BARDEX): Aims, Design and Procedures. *Coastal Engineering* 63, 3-12.
6 **Buscombe, D.**, and Conley, D.C. (2012) Effective Shear Stress of Graded Sediment. *Water Resources Research* 48, W05506.
7 **Buscombe, D.**, and Rubin, D.M. (2012) Advances in the Simulation and Automated Measurement of Granular Material, Part 1: Simulations. *Journal of Geophysical Research - Earth Surface* 117, F02001.
8 **Buscombe, D.**, and Rubin, D.M. (2012) Advances in the Simulation and Automated Measurement of Granular Material, Part 2: Direct Measures of Particle Properties. *Journal of Geophysical Research - Earth Surface* 117, F02002.
9 Lacy, J.R., Rubin, D.M. and **Buscombe, D.** (2012) Currents and sediment transport induced by a tsunami far from its source. *Journal of Geophysical Research - Oceans* 117, C09028.
10 **Buscombe, D.** (2013) Transferable Wavelet Method for Grain Size-Distribution from Images of Sediment Surfaces and Thin Sections, and Other Natural Granular Patterns. *Sedimentology* 60, 1709–1732. DOI: 10.1111/sed.12049