

# 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 Environmental Sciences and Biology, Lancaster University**, Lancaster, UK. *Morphodynamics of a Ridge-and-Runnel System on a Macrotidal Beach*. Advisor: Dr Suzanna Ilic.

## EMPLOYMENT HISTORY

- 1 **November 2012 – present.** *Research Geologist, Grand Canyon Monitoring and Research Center, U.S. Geological Survey, Flagstaff, AZ, USA.*
- 2 **October 2009 – November 2012.** *Post-doctoral Research Fellow, School of Marine Science & Engineering, University of Plymouth, UK.*
- 3 **September, 2008 – 2011.** *Computer Programming Contractor, Marine Biology & Ecology Research Centre, University of Plymouth, UK.*
- 4 **October, 2008 – October 2009.** *Post-doctoral Research Scholar, United States Geological Survey, Santa Cruz, California, USA.*
- 5 **June, 2008 – September, 2008.** *Research Assistant, School of Geography, University of Plymouth, UK.*
- 6 **December, 2007 – April, 2008.** *Research Assistant, School of Earth, Ocean & Environmental Science, University of Plymouth, UK.*
- 7 **October, 2004 – July 2008.** *Associate Lecturer and Demonstrator (part-time), School of Geography, University of Plymouth, UK.*
- 8 **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 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.
- 3 **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.
- 4 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.
- 5 **Buscombe, D.**, and Conley, D.C. (2012) Effective Shear Stress of Graded Sediment. *WATER RESOURCES RESEARCH* 48, W05506.
- 6 **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.
- 7 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.
- 8 **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.
- 9 **Buscombe, D.**, Grams, P.E., Kaplinski, M.A. (2014), Characterizing riverbed sediment using high-frequency acoustics 2: Scattering signatures of Colorado River bed sediment in Marble and Grand Canyons. *JOURNAL OF GEOPHYSICAL RESEARCH - EARTH SURFACE*, 119, doi:10.1002/2014JF003191.
- 10 **Buscombe, D.**, Grams, P.E., Smith, S.M., 2015, Automated riverbed sediment classification using low-cost sidescan sonar. *JOURNAL OF HYDRAULIC ENGINEERING*, 10.1061/(ASCE)HY.1943-7900.0001079, 06015019.