

List of publications in 2014 due to GEF equipment loans

Journal Articles

1. Agurto-Detzel, H., Rietbrock, A., Bataille, K., Miller, M., Iwamori, H. and Priestley, K., **2014**, Seismicity distribution in the vicinity of the Chile Triple Junction, Aysen Region, southern Chile, *Journal of South American Earth Sciences*, 51, doi: 10.1016/j.jsames.2013.12.011 (Loan No:853)
2. Ahmed, A., Leroy, S., Keir, D., Korostelev, F., Khanbari, K., Rolandone, F., Stuart, G.W. and Obrebski, M., **2014**, Crustal structure of the Gulf of Aden southern margin: Evidence from receiver functions on Socotra Island (Yemen), *Tectonophysics*, 637, pp251-267, doi: 10.1016/j.tecto.2014.10.014 (Loan No:873)
3. Booth, A.D., Szpakowska, K., Pischikova, E. and Griffin, K., **2014**, Structure of an Ancient Egyptian Tomb Inferred from Ground-Penetrating Radar Imaging of Deflected Overburden Horizons, *Archaeological Prospection*, doi: 10.1002/arp.1496 (Loan No:951)
4. Brain, M.J., Rosser, N.J., Norman, E.C. and Petley, D.N., **2014**, Are microseismic ground displacements a significant geomorphic agent?, *Geomorphology*, 207, pp161-173, doi: 10.1016/j.geomorph.2013.11.002 (Loan No:879)
5. Connolly, D.P., Kouroussis, G., Giannopoulos, A., Verlinden, O., Woodward, P.K. and Forde, M.C., **2014**, Assessment of railway vibrations using an efficient scoping model, *Soil Dynamics and Earthquake Engineering*, 58, pp37-47, doi: 10.1016/j.soildyn.2013.12.003 (Loan No:971)
6. Connolly, D.P., Kouroussis, G., Woodward, P.K., Costa, P.A., Verlinden, O. and Forde, M.C., **2014**, Field testing and analysis of high speed rail vibrations, *Soil Dynamics and Earthquake Engineering*, 67, pp102-118, doi: 10.1016/j.soildyn.2014.08.013 (Loan No:971)
7. Cook, S.J., Quincey, D.J. and Brasington, J., **2014**, Geomorphology of the Rees Valley, Otago, NZ, *Journal of Maps*, 10(1), pp136-150 (Loan No:892)
8. Corbeau, J., Rolandone, F., Leroy, S., Al-Lazki, A., Stork, A.L., Keir, D., Stuart, G.W., Hammond, J.O.S., Doubre, C., Vergne, J., Ahmed, A. and Khanbari, K., **2014**, Uppermost mantle velocity from Pn tomography in the Gulf of Aden, *Geosphere*, 10(5), pp956-968, doi: 10.1130/GES01052.1 (Loan No:873)
9. Eken, T. and Tilmann, F., **2014**, The Use of Direct Shear Waves in Quantifying Seismic Anisotropy: Exploiting Regional Arrays, *Bulletin of the Seismological Society of America*, doi: 10.1785/0120140020 (Loan No:769)
10. Fonseca, J.F.B.D., Chamussa, J., Domingues, A., Helffrich, G., Antunes, E., van Aswegen, E., Pinto, L.V., Custodio, S. and Manhica, V.J., **2014**, MOZART: A Seismological Investigation of the East African Rift in Central Mozambique, *Seismological Research Letters*, 85(1), pp108-116, doi: 10.1785/0220130082 (Loan No:895)
11. Hamlyn, J.E., Keir, D., Wright, T.J., Neuberger, J.W., Goitom, B., Hammond, J.O.S., Pagli, C., Oppenheimer, C., Kendall, J.M. and Grandin, R., **2014**, Seismicity and subsidence following the 2011 Nabro eruption, Eritrea: Insights into the plumbing system of an off-rift volcano, *Journal of Geophysical Research Solid Earth*, 119(11), pp8267-8282, doi: 10.1002/2014JB011395 (Loan No:913;953)
12. Hammond, J.O.S., **2014**, Constraining melt geometries beneath the Afar Depression, Ethiopia from teleseismic receiver functions: The anisotropic H-k stacking technique, *Geochemistry, Geophysics, Geosystems*, 15(4), pp1316-1332, doi: 10.1002/2013GC005186 (Loan No:803;841)

13. Hammond, J.O.S., Kendall, J.M., Wookey, J., Stuart, G.W., Keir, D. and Ayele, A., **2014**, Differentiating flow, melt, or fossil seismic anisotropy beneath Ethiopia, *Geochemistry, Geophysics, Geosystems*, 15(5), pp1878-1894, doi: 10.1002/2013GC005185 (Loan No:841;885,913,953,956)
14. Hicks, S.P., Rietbrock, A., Ryder, I.M.A., Lee, C.S. and Miller, M., **2014**, Anatomy of a megathrust: The 2010 M8.8 Maule, Chile earthquake rupture zone imaged using seismic tomography, *Earth and Planetary Science Letters*, 405, pp142-155, doi: 10.1016/j.epsl.2014.08.028 (Loan No:922)
15. Korostelev, F., Basuyau, C., Leroy, S., Tiberi, C., Ahmed, A., Stuart, G.W., Keir, D., Rolandone, F., Al Ganad, I., Khanbari, K. and Boschi, L., **2014**, Crustal and upper mantle structure beneath south-western margin of the Arabian Peninsula from teleseismic tomography, *Geochemistry, Geophysics, Geosystems*, 15(7), pp2850-2864, doi: 10.1002/2014GC005316 (Loan No:873)
16. Kouroussis, G., Connolly, D.P., Verlinden, O. and Forde, M.C., **2014**, Train speed calculation using ground vibrations, *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, 0(0), pp1-18, doi: 10.1177/0954409713515649 (Loan No:971)
17. Kulesa, B., Jansen, D.I., Luckman, A.J., King, E.C. and Sammonds, P.R., **2014**, Marine ice regulates the future stability of a large Antarctic ice shelf, *Nature Communications*, 5, doi: 10.1038/ncomms4707 (Loan No:863;905)
18. Mahoney, C., Kljun, N., Sietse, O.L., Chasmer, L., Hacker, J.M., Hopkinson, C., North, P.R.J., Rosette, J.A.B. and van Gersel, E., **2014**, Slope Estimation from ICESat/GLAS, *Remote Sensing*, 6, pp10051-10069, doi: 10.3390/rs61010051 (Loan No:909;933)
19. Morris, E.M. and Wingham, D.J., **2014**, Densification of polar snow: measurements, modelling and implications for altimetry, *Journal of Geophysical Research Earth Surface*, doi: 10.1002/2013JF002898 (Loan No:923)
20. Nunn, C., Roecker, S., Priestley, K., Liang, X. and Gilligan, A., **2014**, Joint inversion of surface waves and teleseismic body waves across the Tibetan collision zone: the fate of subducted Indian lithosphere, *Geophysical Journal International*, 198(3), pp1526-1542, doi: 10.1093/gji/ggu193 (Loan No:774)
21. Nunn, C., Roecker, S.W., Tilmann, F.J., Priestley, K.F., Heyburn, R., Sandvol, E.A., Ni, J.F., John Chen, Y. and Zhao, W., **2014**, Imaging the lithosphere beneath NE Tibet: teleseismic P and S body wave tomography incorporating surface wave starting models, *Geophysical Journal International*, 196(3), pp1724-1741, doi: 10.1093/gji/ggt476 (Loan No:769)
22. Ross, N., Jordan, T.A., Bingham, R.G., Corr, H.F.J., Ferraccioli, F., Le Brocq, A., Rippin, D.M., Wright, A.P. and Siegert, M.J., **2014**, The Ellsworth Subglacial Highlands: Inception and retreat of the West Antarctic Ice Sheet, *Geological Society of America Bulletin*, 126(1-2), pp3-15, doi: 10.1130/B30794.1 (Loan No:838;870)
23. Spagnolo, M., King, E.C., Ashmore, D.W., Rea, B.R., Ely, J.C. and Clark, C.D., **2014**, Looking through drumlins: testing the application of ground-penetrating radar, *Journal of Glaciology*, 60(224), pp1126-1134, doi: 10.3189/2014JoG14J110 (Loan No:990)
24. Suess, S., van der Linden, S., Leitao, P.J., Okujeni, A., Waske, B. and Hostert, P., **2014**, Import Vector Machines for Quantitative Analysis of Hyperspectral Data, *Geoscience and Remote Sensing Letters, IEEE*, 11(2), pp449-453, doi: 10.1109/LGRS.2013.2265102 (Loan No:954)
25. Tedstone, A.J., Nienow, P.W., Gourmelen, N. and Sole, A.J., **2014**, Greenland ice sheet annual motion insensitive to spatial variations in subglacial hydraulic structure, *Geophysical Research Letters*, 41(24), pp8910-8917, doi: 10.1002/2014GL062386 (Loan No:868)

26. Williams, R.D., Brasington, J., Vericat, D. and Hicks, D.M., **2014**, Hyperscale terrain modelling of braided rivers: fusing mobile terrestrial laser scanning and optical bathymetric mapping, *Earth Surface Processes and Landforms*, 39(2), pp167-183, doi: 10.1002/esp.3437 (Loan No:892)

Conference Papers/Proceedings

1. Barrett, A., Balme, M., Patel, M. and Hagerman, A., **2014**, Patterned ground in and around Lomonosov Crater, Mars, *2nd Mars Cryosphere Workshop, Wroclaw, Poland* (Loan No:999)
2. Barrett, A., Balme, M., Patel, M. and Hagerman, A., **2014**, Sorted patterned ground as an indicator of periglacial activity in and around Lomonosov Crater, Mars, *Geological Society Fermor Meeting 2014: Comparative Planetology* (Loan No:999)
3. Bayrakci, G., Minshull, T., Davy, R.G., Swayer, D.S., Klaeschen, D., Papenburg, C.A., Reston, T.J., Shillington, D.J. and Ranero, C.R., **2014**, 3D P-Wave Velocity Structure of the Deep Galicia Rifted Margin, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T54A-03
4. Bunting, C., Branch, N., Robinson, S. and Johnes, P., **2014**, Ground penetrating radar as a tool to improve heritage management of wetlands, *2014 15th International Conference on Ground Penetrating Radar (GPR), June 30 - July 4, 2014, Brussels*, pp54-59, doi: 10.1109/ICGPR.2014.6970384 (Loan No:991)
5. Davy, R.G., Minshull, T.A., Bayrakci, G., Bull, J.M., Sawyer, D.S., Klaeschen, D., Papenberg, C.A., Reston, T.J., Shillington, D.J., Ranero, C. and Zelt, C.A., **2014**, Searching for the Onset of Seafloor Spreading West of Galicia: Wide-Angle Seismic Constraints, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T43-4684
6. Donohue, S., Gunn, D.A., Bergamo, P., Hughes, E., Dashwood, B., Uhlemann, S., Chambers, J.E. and Ward, D., **2014**, Assessing Climate Effects on Railway Earthworks Using MASW, *Near Surface Geoscience 2014 - 20th European Meeting of Environmental and Engineering Geophysics*, EAGE, doi: 10.3997/2214-4609.20141995 (Loan No:958)
7. Donohue, S., Gunn, D.A., Bergamo, P., Hughes, E., Dashwood, B., Uhlemann, S., Chambers, J.E. and Ward, D., **2014**, Assessing Climate Effects on Railway Earthworks Using MASW, *Near Surface Geoscience 2014 - 20th European Meeting of Environmental and Engineering Geophysics*, EAGE, doi: 10.3997/2214-4609.20141995 (Loan No:958)
8. Funnell, M.J., Peirce, C., Stratford, W.R., Watts, A.B. and Grevemeyer, I., **2014**, Crustal Structure and Flexural Characteristics of the Louisville Ridge and Tonga-Kermadec Subduction System, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T53C-4694
9. Holley, R., Thomas, A., Wooster, M. and Lowry, B., **2014**, Terrestrial Radar Interferometry: simultaneous digital elevation and slope stability measurements, *17th General Assembly of WEGENER on earth deformation and the study of earthquakes using geodesy and geodynamics, University of Leeds, UK, 1-4 September 2014* (Loan No:1023)
10. Ineson, P. and Stockdale, J., **2014**, SkyLine and SkyGas: Novel automated technologies for automatic GHG flux measurements, *EGU, Vienna, EGU General Assembly* (Loan No:979)
11. Karplus, M., Henstock, T., McNeill, L.C., Vermeesch, P.M.T. and Barton, P.J., **2014**, P-wave velocity structure offshore central Sumatra: implications for compressional and strike-slip faulting, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T51A-4593 (Loan No:828)

12. Kendall, M., Hammond, J., Civiero, C., Goes, S., Ahmed, A., Ayele, A., Doubre, C., Goitom, B., Keir, D., Kendall, M., Leroy, S., Ogubazghi, G., Rumpker, G. and Stuart, G., **2014**, P-wave travel-time tomography reveals multiple mantle upwellings beneath the northern East-Africa Rift, *American Geophysical Union, Fall Meeting 2014, San Francisco*, DI143A-4349 (Loan No:841;885;913;953;956)
13. Robinson, A.H., Peirce, C., Stratford, W.R., Watts, A.B. and Grevemeyer, I., **2014**, Crustal and Upper Mantle Structure of the Louisville Ridge Seamount Chain at Its Intersection with the Tonga-Kermadec Subduction Zone, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T53C-4693
14. Robinson, A.H., Peirce, C., Stratford, W.R., Watts, A.B. and Grevemeyer, I., **2014**, Crustal and Upper Mantle Structure of the Louisville Ridge Seamount Chain at Its Intersection with the Tonga-Kermadec Subduction Zone, *American Geophysical Union, Fall Meeting 2014, San Francisco*, T53C-4693
15. Schiffer, C., Stephenson, R.A. and Oakey, G., **2014**, The crustal structure of Ellesmere Island from receiver function modelling, *GSA Annual Meeting, Vancouver, British Columbia, 19-22 October 2014, Geological Society of America*, 271-11 (Loan No:890)
16. Stephenson, R., Schiffer, C. and Oakey, G., **2014**, The lithosphere of Ellesmere Island and adjacent northwestern Greenland (CALE `A` transect onshore), *American Geophysical Union, Fall Meeting 2014, San Francisco* (Loan No:890)
17. Stephenson, R.A., Piepjohn, K., Schiffer, C. and Oakey, G., **2014**, Combined crustal-geological cross-section of Ellesmere Island, *GSA Annual Meeting, Vancouver, British Columbia, 19-22 October 2014, Geological Society of America*, 271-12 (Loan No:890)
18. Vinciguerra, S., Colombero, C., Comina, C., Ferrero, A.M., Mandrone, G. and Umili, G., **2014**, An integrated approach for monitoring slow deformations preceding dynamic failure in rockfalls, *10th Euroconference on Rock Physics and Rock Mechanics, Aussois, France, 12 - 15 May 2014, Laboratoire 3SR* (Loan No:1004)
19. Webster, E.J., Belyea, L.R. and Heppell, C.M., **2014**, Carbon storage in floodplain fens along a gradient of saline influence, *Broads Authority Biodiversity Group Meeting, Dragonfly House, Norfolk, 4th November 2014* (Loan No:1024)
20. Weitemeyer, K., Goswami, B.K., Minshull, T.A., Westbrook, G.K. and Sinha, M.C., **2014**, Controlled Source Electromagnetic (CSEM) and Seismic Interpretation of Fluid Escape Features at the Vestnesa Ridge, West Svalbard Continental Margin, *American Geophysical Union, Fall Meeting 2014, San Francisco*, OS21A-1096

PhD Theses

1. Ashmore, D., **2014**, The basal environment of Antarctic ice streams from airborne ice-penetrating radar, *University of Aberdeen*(Loan No:990)
2. Barrett, A., **2014**, An Investigation of Potential Periglacial Landforms on the Northern Plains of Mars: An Integrated Field, Laboratory and Remote Sensing Study, *The Open University*(Loan No:999)
3. Baugh, C.A., **2014**, The hydraulics of the Amazon river floodplain, *University of Bristol*(Loan No:949)
4. Hall, A.C., **2014**, Observing water level dynamics in the Amazon using satellite altimetry, *University of Bristol*(Loan No:949)

5. Kelly, C., **2014**, Understanding seismic properties of fault zones, *University of Liverpool*(Loan No:902)
6. Mahoney, C., **2014**, Improved estimates of vegetation and terrain parameters from waveform LiDAR, *University of Swansea*(Loan No:909)
7. Williams, R.D., **2014**, Two-dimensional numerical modelling of natural braided river morphodynamics, *Aberystwyth University*(Loan No:892)