

## List of publications in 2013 due to GEF equipment loans

### Journal Articles

1. Ahmed, A., Leroy, S., Tiberi, C., Stuart, G., Keir, D., Sholan, J., Khanbari, K., Al-Ganad, I. and Basuyau, C., **2013**, Crustal structure of the rifted volcanic margins and uplifted plateau of Western Yemen from receiver function analysis, *Geophysical Journal International*, doi: 10.1093/gji/ggt072 (Loan No:873)
2. Al-Lazki, A., Ebinger, C., Kendall, M., Helffrich, G., Leroy, S., Tiberi, C., Stuart, G. and Al-Toobi, K., **2013**, Upper mantle anisotropy of Southeast Arabia passive margin [Gulf of aden northern conjugate margin], Oman, *Frontiers in Earth Sciences*, 5, pp429-438, doi: 10.1007/978-3-642-30609-9\_21 (Loan No:873)
3. Bedford, J., Moreno, M., Baez, J.C., Lange, D., Tilmann, F., Rosenau, M., Heidbach, O., Oncken, O., Bartsch, M., Rietbrock, A., Tassara, A., Bevis, M. and Vigny, C., **2013**, A high-resolution, time-variable afterslip model for the 2010 Maule Mw = 8.8, Chile megathrust earthquake, *Earth and Planetary Science Letters*, 383, pp26-36, doi: 10.1016/j.epsl.2013.09.020 (Loan No:922)
4. Belachew, M., Ebinger, C. and Cote, D., **2013**, Source mechanisms of dike-induced earthquakes in the Dabbahu-Manda Hararo rift segment in Afar, Ethiopia: implications for faulting above dikes, *Geophysical Journal International*, 192(3), pp907-917, doi: 10.1093/gji/ggs076 (Loan No:841)
5. Brain, M.J., Rosser, N.J., Norman, E.C. and Petley, D.N., **2013**, Are microseismic ground displacements a significant geomorphic agent?, *Geomorphology*, doi: 10.1016/j.geomorph.2013.11.002 (Loan No:879)
6. Burtin, A., Hovius, N., McArdeell, B.W., Turowski, J.M. and Vergne, J., **2013**, Seismic constraints on dynamic links between geomorphic processes and routing of sediment in a steep mountain catchment, *Earth Surface Dynamics Discussions*, 1, pp783-816, doi: 10.5194/esurfd-1-783-2013 (Loan No:950)
7. Collings, R., Rietbrock, A., Lange, D., Tilmann, F., Nippres, S. and Natawidjaja, D., **2013**, Seismic anisotropy in the Sumatra subduction zone, *Journal of Geophysical Research Solid Earth*, 118(10), pp5372-5390, doi: 10.1002/jgrb.50157 (Loan No:828)
8. Connolly, D., Giannopoulos, A., Fan, W., Woodward, P.K. and Forde, M.C., **2013**, Optimising low acoustic impedance backfill material wave barrier dimensions to shield structures from ground borne high speed rail vibrations, *Construction and Building Materials*, 44, pp557-564, doi: 10.1016/j.conbuildmat.2013.03.034 (Loan No:971)
9. Connolly, D., Giannopoulos, A. and Forde, M.C., **2013**, Numerical modelling of ground borne vibrations from high speed rail lines on embankments, *Soil Dynamics and Earthquake Engineering*, 46, pp13-19, doi: 10.1016/j.soildyn.2012.12.003 (Loan No:971)
10. Darbyshire, F.A., Eaton, D.W. and Bastow, I.D., **2013**, Seismic imaging of the lithosphere beneath Hudson Bay: Episodic growth of the Laurentian mantle keel, *Earth and Planetary Science Letters*, 373, pp179-193, doi: 10.1016/j.epsl.2013.05.002 (Loan No:900)
11. del Potro, R., Diez, M., Blundy, J., Camacho, A.G. and Gottsmann, J., **2013**, Diapiric ascent of silicic magma beneath the Bolivian Altiplano, *Geophysical Research Letters*, 40, pp2044-2048, doi: 10.1002/grl.50493 (Loan No:910;928)
12. Desissa, M., Johnson, N.E., Whaler, K.A., Hautot, S., Fisseha, S. and Dawes, G.J.K., **2013**, A mantle magma reservoir beneath an incipient mid-ocean ridge in Afar, Ethiopia, *Nature Geoscience*, 6(10), pp861-865, doi: 10.1038/ngeo1925 (Loan No:855;907)

13. Dow, C.F., Hubbard, A., Booth, A.D., Doyle, S.H., Gusmerol, A. and Kulesa, B., **2013**, Seismic evidence of mechanically weak sediments underlying Russell Glacier, West Greenland, *Annals of Glaciology*, 54(64), pp135-141, doi: 10.3189/2013AoG64A032 (Loan No:875)
14. Doyle, S.H., Hubbard, A.L., Dow, C.F., Jones, G.A., Fitzpatrick, A., Gusmeroli, A., Kulesa, B., Lindback, K., Pettersson, R. and Box, J.E., **2013**, Ice tectonic deformation during the rapid in situ drainage of a supraglacial lake on the Greenland Ice Sheet, *Cryosphere*, 7, pp129-140, doi: 10.5194/tc-7-129-2013 (Loan No:875;876)
15. Drew, J., White, R.S., Tilmann, F. and Tarasewicz, J., **2013**, Coalescence microseismic mapping, *Geophysical Journal International*, 195, pp1773-1785, doi: 10.1093/gji/ggt331 (Loan No:842)
16. Fitzpatrick, A.A.W., Hubbard, A.L., Box, J.E., Quincey, D.J., van As, D., Mikkelsen, A.P.B., Doyle, S.H., Dow, C.F., Hasholt, B. and Jones, G.A., **2013**, A decade of supraglacial lake volume estimates across a land-terminating margin of the Greenland Ice Sheet, *Cryosphere Discussions*, 7, pp1383-1414, doi: 10.5194/tcd-7-1383-2013 (Loan No:875;876)
17. Goswami, B., Weitmeyer, K., Minshull, T., Sinha, M. and Westbrook, G., **2013**, CSEM Survey of a Methane Vent Site, Offshore West Svalbard, *Fire in the Ice*, 13, pp12-18
18. Green, R.G., White, R.S. and Greenfield, T., **2013**, Motion in the north Iceland volcanic rift zone accommodated by bookshelf faulting, *Nature Geoscience*, doi: 10.1038/ngeo2012 (Loan No:914;968)
19. Hammond, J.O.S., Kendall, J.-M., Stuart, G.W., Ebinger, C.J., Bastow, I.D., Keir, D., Ayele, A., Belachew, M., Goitom, B., Ogubazghi, G. and Wright, T.J., **2013**, Mantle upwelling and initiation of rift segmentation beneath the Afar Depression, *Geology*, doi: 10.1130/G33925.1 (Loan No:885)
20. Harland, S.R., Kendall, J.-M., Stuart, G.W., Lloyd, G.E., Baird, A.F., Smith, A.M., Pritchard, H.D. and Brisbourne, A.M., **2013**, Deformation in Rutford Ice Stream, West Antarctica: measuring shear-wave anisotropy from icequakes, *Annals of Glaciology*, 54(64), pp105-114, doi: 10.3189/2013AoG64A033 (Loan No:936)
21. Hobbs, B.A., Fonseka, G.M., Jones, A.G., De Silva, S.N., Subasinghe, N.D., Dawes, G., Johnson, N., Cooray, T., Wijesundara, D., Suriyaarachchi, N., Nimalisiri, T., Premathilake, K.M., Kiyan, D. and Khoza, D., **2013**, Geothermal Energy Potential in Sri Lanka: A preliminary magnetotelluric survey of thermal springs, *Journal of the Geological Society of Sri Lanka*, 15, pp69-83 (Loan No:915)
22. Jansen, D., Luckman, A., Kulesa, B., Holland, P.R. and King, E.C., **2013**, Marine ice formation in a suture zone on the Larsen C Ice Shelf and its influence on ice shelf dynamics, *Journal of Geophysical Research Earth Surface*, 118, pp1628-1640, doi: 10.1002/jgrf.20120 (Loan No:905)
23. Jones, G.A., Kulesa, B., Doyle, S.H., Dow, C.F. and Hubbard, A., **2013**, An automated approach to the location of icequakes using seismic waveform amplitudes, *Annals of Glaciology*, 54(64), pp1-9, doi: 10.3189/2013AoG64A074 (Loan No:875;876)
24. Leroy, S., Autin, J., Bache, F., d'Acremont, E., Watremez, L., Robinet, J., Baurion, C., Denele, Y., Bellahsen, N., Rolandone, F., Rouzo, S., Khanbari, K., Razin, P., Lucazeau, F., Basuyau, C., Kiel, J.S., Robin, C., Guillocheau, F., Tiberi, C., Beslier, M.-O., Ebinger, C., Stuart, G., Ahmed, A. and Al-Ga, **2013**, From rifting to oceanic spreading in the Gulf of Aden: A synthesis, *Frontiers in Earth Sciences*, 5, pp385-427, doi: 10.1007/978-3-642-30609-9\_20 (Loan No:885)

25. Martens, H. and White, R.S., **2013**, Triggering of microearthquakes in Iceland by volatiles released from a dyke intrusion, *Geophysical Journal International*, 194(3), pp1738-1754, doi: 10.1093/gji/ggt184 (Loan No:842;914)
26. Mitchell, M.A., White, R.S., Roecker, S. and Greenfield, T., **2013**, Tomographic image of melt storage beneath Askja Volcano, Iceland using local microseismicity, *Geophysical Research Letters*, 40, pp5040-5046, doi: 10.1002/grl.50899 (Loan No:857;914)
27. Ng, F. and King, E.C., **2013**, Formation of RADARSAT backscatter feature and undulating firm stratigraphy at an ice-stream margin, *Annals of Glaciology*, 54(64), pp90-96, doi: 10.3189/2013AoG64A202
28. Norman, E.C., Rosser, N.J., Brain, M.J., Petley, D.N. and Lim, M., **2013**, Coastal cliff-top ground motions as proxies for environmental processes, *Journal of Geophysical Research Oceans*, 118, pp6807-6823, doi: 10.1002/2013JC008963 (Loan No:879)
29. Pomeroy, J., Brisbane, A., Evans, J. and Graham, D., **2013**, The search for seismic signatures of movement at the glacier bed in a polythermal valley glacier, *Annals of Glaciology*, 54(64), pp149-156, doi: 10.3189/2013AoG64A203 (Loan No:925)
30. Ren, Y., Grecu, B., Stuart, G., Houseman, G., Hegedus, E. and South Carpathian Project Working Group, **2013**, Crustal structure of the Carpathian-Pannonian region from ambient noise tomography, *Geophysical Journal International*, 195(2), pp1351-1369, doi: 10.1093/gji/ggt316 (Loan No:883)
31. Smith, A.M., Jordan, T.A., Ferraccioli, F. and Bingham, R.G., **2013**, Influence of subglacial conditions on ice stream dynamics: Seismic and potential field data from Pine Island Glacier, West Antarctica, *Journal of Geophysical Research Solid Earth*, 118, pp1471-1482, doi: 10.1029/2012JB009582 (Loan No:936)
32. Sole, A., Nienow, P., Bartholomew, I., Mair, D., Cowton, T., Tedstone, A. and King, M.A., **2013**, Winter motion mediates dynamic response of the Greenland Ice Sheet to warmer summers, *Geophysical Research Letters*, 40, pp3940-3944, doi: 10.1002/grl.50764 (Loan No:868)
33. Stork, A.L., Stuart, G.W., Henderson, C.M., Keir, D. and Hammond, J.O.S., **2013**, Uppermost mantle (Pn) velocity model for the Afar region, Ethiopia: An insight into rifting processes, *Geophysical Journal International*, 193(1), pp321-328, doi: 10.1093/gji/ggs106 (Loan No:885)
34. Tang, G., Barton, P., McNeill, L., Henstock, T., Tilmann, F., Dean, S., Jusuf, M., Djajadihardja, Y., Permana, H., Klingelhoefer, F. and Kopp, H., **2013**, 3D active source tomography around Simeulue Island offshore Sumatra: thick crustal zone responsible for earthquake segment boundary, *Geophysical Research Letters*, 40(1), pp48-53, doi: 10.1029/2012GL054148
35. Wheaton, J.M., Brasington, J., Darby, S.E., Kasprak, A., Sear, D. and Vericat, D., **2013**, Morphodynamic signatures of braiding mechanisms as expressed through change in sediment storage in a gravel-bed river, *Journal of Geophysical Research Earth Surface*, 118(2), pp759-779, doi: 10.1002/jgrf.20060 (Loan No:724)
36. Williams, R.D., Brasington, J., Hicks, M., Measures, R., Rennie, C.D. and Vericat, D., **2013**, Hydraulic validation of two-dimensional simulations of braided river flow with spatially continuous ADCP data, *Water Resources Research*, 49, pp5183-5205, doi: 10.1002/wrcr.20391 (Loan No:892)

## Conference Papers/Proceedings

1. Bristow, C.S. et al., **2013**, New insights into megaflood gravel dunes from GPR surveys, Altai Mountains, Siberia, *10th International Conference on Fluvial Sedimentology, University of Leeds, 14-19th July 2013* (Loan No:970)
2. Carling, P.A., Bristow, C.S., Rand, J., Litvinov, A. and Bohorquez, P., **2013**, Radar Stratigraphy and Hydraulic Interpretation of Megaflood Gravel Dune, *8th Symposium on River, Coastal and Estuarine Morphodynamics, RCEM 2013, Santander, Spain* (Loan No:970)
3. Connolly, D.P., Peters, J., Sim, A., Fan., W., Giannopoulos, A. and Forde, M.C., **2013**, Significantly reducing environmental assessment costs on new rail lines using an innovative vibration prediction tool, *Railway Engineering 2013, London, UK* (Loan No:971)
4. Domingues, A., Chamussa, J., Helffrich, G., Fishwick, S., Ferreira, A., Custodio, S., Silveira. G, Manhica, V. and Fonseca, J., **2013**, MOZART – A seismological investigation of Central Mozambique, *Geophysical Research Abstracts, EGU General Assembly, 15, EGU2013-7935* (Loan No:895)
5. Domingues, A.L., Chamussa, J.R., Silveira, G.M., Custodio, S., Lebedev, S., Chang, S., Ferreira, A.M. and Fonseca, J.F., **2013**, Ambient Noise Tomography of the East African Rift System in Mozambique, *American Geophysical Union, Fall Meeting 2013, Abstract T11F-03* (Loan No:895)
6. Green, R., Greenfield, T., Key, J., Mitchell, M., Soosalu, H. and White, R.S., **2013**, Seismicity around Askja: Tectonic faulting and magmatism, *European Seismological Commission workshop: Seismic phenomena associated with volcanic activity, Sulawesi, Indonesia, 8-14 Sep 2013* (Loan No:914;968)
7. Green, R., White, R.S., Greenfield, T., Tarasewicz, J, Soosalu, H. and Key, J., **2013**, Crustal deformation between volcanic segments of the Askja and Kverkfjall central volcanoes, Northern Iceland, *VMSG 2013, Bristol* (Loan No:914)
8. Green, R.G., White, R.S. and Greenfield, T., **2013**, Bookshelf faulting and rotations in the north Iceland volcanic rift zone, *British Geophysical Association, Cambridge, Sept 2013* (Loan No:914;968)
9. Green, R.G., White, R.S. and Greenfield, T., **2013**, Bookshelf faulting and transform motion between rift segments of the Northern Volcanic Zone, Iceland, *American Geophysical Union, Fall Meeting 2013, Abstract S51C-2381* (Loan No:914;968)
10. Green, R.G., White, R.S. and Greenfield, T., **2013**, Bookshelf faulting and transform motion between rift segments of the Northern Volcanic Zone, Iceland, *American Geophysical Union, Fall Meeting 2013, Abstract S51C-2381* (Loan No:914;968)
11. Greenfield, T., Key, J., Martens, H.R., Mitchell, M.A. and White, R.S., **2013**, Local Earthquake Tomographic Imaging of a Magma Chamber beneath Askja Volcano, Iceland, *VMSG 2013, Bristol* (Loan No:968)
12. Greenfield, T., Key, J., Martens, H.R., Mitchell, M.A. and White, R.S., **2013**, Local Earthquake Tomographic Imaging of a Magma Chamber beneath Askja Volcano, Iceland, *VMSG 2013, Bristol* (Loan No:968)
13. Greenfield, T.S. and White, R.S., **2013**, Magma Plumbing beneath Askja Volcano, Iceland, *American Geophysical Union, Fall Meeting 2013, Abstract V41B-2781* (Loan No:914;968)
14. Jenkins, J. and Rietbrock, R., **2013**, Repeating earthquakes on the Chile Subduction zone following the Maule 2010 Earthquake, *Geophysical Research Abstracts, EGU General Assembly, 15, EGU2013-5714* (Loan No:922)
15. Korostelev, F., Basuyau, C., Leroy, S., Ahmed, A., Keir, D., Stuart, G., Rolandone, F., Ganad, I. and Khanbari, K., **2013**, Influence of the Afar plume on the deep structure of Aden and Red

Sea margins - Insight from teleseismic tomography in western Yemen, *EGU, Vienna, EGU General Assembly*, EGU2013-10564 (Loan No:873)

16. Kouroussis, G., Connolly, D.P., Forde, M. and Verlinden, O., **2013**, An experimental study of embankment conditions on high speed railway ground vibrations, *International congress of sound and vibration, Bangkok, Thailand* (Loan No:971)
17. Kouroussis, G., Connolly, D.P., Forde, M. and Verlinden, O., **2013**, An experimental analysis of embankment vibrations due to high speed rail, *Railway Engineering 2013, London, UK* (Loan No:971)
18. Leitao, P.J., Moreira, F., Osborne, P.E., Pinto, M.J., Catry, L. and Hostert, P., **2013**, Mapping turnover in bird community composition with satellite spectral data, *Annual Meeting of the German Ecological Society, 9th-13th September, Potsdam, Germany* (Loan No:934;954)
19. Leitao, P.J., Suess, S., Schwieder, M., Milton, E.J., van der Linden, S. and Hostert, P., **2013**, Hyperspectral satellite data for modelling spatial beta diversity patterns of birds along an environmental gradient, *ESA Living Planet Symposium, 9th-13th September, Edinburgh, UK* (Loan No:934;954)
20. Martins, J., Hooper, A., Draganov, D., Ruigrok, E., White, R.S., Hansen, R. and Soosalu, H., **2013**, The magmatic system beneath Torfajökull volcano, Iceland: A combination of radar and seismic interferometric analysis, *American Geophysical Union, Fall Meeting 2013*, Abstract V51E-2727 (Loan No:779)
21. Norman, E.C., Rosser, N.J., Szczucinski, W., Dunning, S., Long, A.J., Strzelecki, M.C., Drewniak, M. and Benjamin, J., **2013**, Seismic signatures of iceberg failure, collapse and rolls, *American Geophysical Union, Fall Meeting 2013*, Abstract C54B-08 (Loan No:984)
22. Pugh, D.J., Watson, Z., Tarasewicz, J., White, R.S. and Christie, P.A., **2013**, Investigating non-double-couple source mechanisms in the Krafla geothermal region, Northern Volcanic Zone, Iceland, *American Geophysical Union, Fall Meeting 2013*, Abstract S33D-2455 (Loan No:914)
23. Pugh, D.J., Watson, Z., Tarasewicz, J., White, R.S. and Christie, P.A., **2013**, Investigating non-double-couple source mechanisms in the Krafla geothermal region, Northern Volcanic Zone, Iceland, *American Geophysical Union, Fall Meeting 2013*, Abstract S33D-2455 (Loan No:914)
24. Rosser, N.J., Szczucinski, W., Strzelecki, M., Long, A.J., Norman, E.C., Dunning, S. and Drewniak, M., **2013**, The record of iceberg roll generated waves from sediments and seismics, *American Geophysical Union, Fall Meeting 2013*, Abstract NH41A-1686 (Loan No:984)
25. Shannon, S.R., Payne, A.J., Bartholomew, I.D., van den Broeke, M.R., Edwards, T.L., Fettweis, X., Gagliardini, O., Gillet-Chaulet, F., Goelzer, H., Hoffman, M., Huybrechts, P., Mair, D.W.F., Nienow, P.W., Perego, M., Price, S.F., Smeets, C.J.P., Sole, A.J., van de Wal, R.S.W. and Zwinger, T., **2013**, Enhanced basal lubrication and the contribution of the Greenland ice sheet to future sea-level rise, *Proceedings of the National Academy of Sciences of the United States of America*, 110(35), pp14156-14161, doi: 10.1073/pnas.1212647110 (Loan No:868)
26. Smith, E.C., Smith, A.M., White, R.S. and Brisbourne, A., **2013**, Icequakes! Microseismic `Sticky Spots` in Rutford Ice Stream, West Antarctica, *American Geophysical Union, Fall Meeting 2013*, Abstract C51B-0525 (Loan No:936)
27. Smith, E.C., Smith, A.M., White, R.S. and Brisbourne, A., **2013**, Icequakes! Microseismic `Sticky Spots` in Rutford Ice Stream, West Antarctica, *American Geophysical Union, Fall Meeting 2013*, Abstract C51B-0525 (Loan No:936)

28. Suess, S., Leitao, P.J., van der Linden, S., Okujeni, A. and Hostert, P., **2013**, Import Vector Machines for quantitative Mapping of vegetation cover fractions in natural-heterogeneous environments, *EnMAP Workshop, 14th November 2013, Bonn, Germany* (Loan No:934;954)
29. Tarasewicz, J., Brandsdottir, B., Schoonman, C. and White, R.S., **2013**, Microseismicity preceding the 2010 Eyjafjallajökull flank eruption, *IASPEI Joint Assembly, Gothenburg, Sweden, 22-26 July 2013* (Loan No:914)
30. Tedstone, A., Nienow, P., Sole, A., Mair, D., Cowton, T., Bartholomew, I. and King, M., **2013**, Greenland ice sheet motion insensitive to exceptional melt water forcing, *Proceedings of the National Academy of Sciences of the United States of America*, 110(49), doi: 10.1073/pnas.1315843110 (Loan No:868)
31. Tedstone, A.J., Nienow, P.W., Sole, A.J., Mair, D.W.F., Cowton, T.R., Bartholomew, I.D. and King, M.A., **2013**, Greenland ice sheet motion insensitive to exceptional meltwater forcing, *Proceedings of the National Academy of Sciences of the United States of America*, 110(49), pp19719-19724, doi: 10.1073/pnas.1315843110 (Loan No:868)
32. Turkelli, N., Kahraman, M., Poyraz, S.A., Teoman, M.U., Rost, S., Houseman, G.A., Thompson, D., Cornwell, D., Utkucu, M. and Gulen, L., **2013**, Preliminary Results from DANA Array on the Crustal Structure of the Western Segment of NAF, *7th Congress of the Balkan Geophysical Society*, doi: 10.3997/2214-4609.20131757 (Loan No:947)
33. White, R.S., Tarasewicz, J., Brandsdottir, B. and Schoonman, C., **2013**, Seismogenic `trapdoors` during magma intrusion at Eyjafjallajökull volcano, Iceland, *American Geophysical Union, Fall Meeting 2013*, Abstract V34B-07 (Loan No:891;914)

## PhD Theses

1. Ahmed, A., **2013**, Crustal structure and seismicity of Yemen and the Gulf of Aden, *University of Paris*(Loan No:873)
2. Connolly, D., **2013**, Ground borne vibrations from high speed trains, *University of Edinburgh*(Loan No:971)
3. Cowton, T.R., **2013**, Hydrology of a land-terminating Greenlandic outlet glacier, *University of Edinburgh*(Loan No:868)
4. Johnson, N. E., **2013**, Magnetotelluric studies of the crust and upper mantle in a zone of active continental breakup, Afar, Ethiopia, *University of Edinburgh*(Loan No:886)
5. Parks, M., **2013**, Volcanic processes during eruption and unrest: combining satellite and ground-based monitoring at Galeras and Santorini volcanoes, *University of Oxford*(Loan No:952)
6. Pomeroy, J., **2013**, The sedimentary and geomorphic signature of subglacial processes in the Tarfala Valley, northern Sweden, and the links between subglacial soft-bed deformation, glacier flow dynamics, and landform generation, *Loughborough University*(Loan No:925)
7. Tarasewicz, J., **2013**, Microseismicity associated with the 2010 eruption of Eyjafjallajökull volcano, Iceland, *University of Cambridge*(Loan No:914)
8. Thompson, S., **2013**, A novel integrated geophysical and glaciological assessment of the formation and evolution of potentially hazardous moraine-dammed glacial lakes, *University of Swansea*(Loan No:926)

March 16