List of publications in 2015 due to GEF equipment loans

Journal Articles

1. Armitage, J.J., Ferguson, D.J., Goes, S., Hammond, J.O.S., Calais, E., Rychert, C.A. and Harmon, N., **2015**, Upper mantle temperature and the onset of extension and break-up in Afar, Africa, *Earth and Planetary Science Letters*, 418, doi: 10.1016/j.epsl.2015.02.039 (Loan No:841)

2. Altuncu Poyraz, S., Ugur Teoman, M., Turkelli, N., Kahraman, M., Cambaz, D., Mutlu, A., Rost, S., Houseman, G.A., Thompson, D.A., Cornwell, D., Utkucu, M. and Gulen, L., **2015**, New constraints on micro-seismicity and stress state in the western part of the North Anatolian Fault Zone: Observations from a dense seismic array, *Tectonophysics*, 656, pp190-201, doi: 10.1016/j/tecto.2015.06.022 (Loan No:947)

3. Ayele, A., Ebinger, C.J., van Alstyne, C., Keir, D., Nixon, C.W., Belachew, M. and Hammond, J.O.S., **2015**, Seismicity of the central Afar rift and implications for Tendaho dam hazards, *Geological Society of London Special Publications*, doi: 10.1144/SP420.9 (Loan No:841;885;913;953;956)

4. Barnie, T.D., Keir, D., Hamling, I., Hofmann, B., Belachew, M., Carn, S., Eastwell, D., Hammond, J.O.S., Ayele, A., Oppenheimer, C. and Wright, T., **2015**, A multidisciplinary study of the final episode of the Manda Hararo dyke sequence, Ethiopia, and implications for trends in volcanism during the rifting cycle, *Geological Society of London Special Publications*, doi: 10.1144/SP420.6 (Loan No:907)

5. Bastow, I.D., Eaton, D.W., Kendall, J.M., Helffrich, G., Snyder, D.B., Thompson, D.A., Wookey, J., Darbyshire,F.A. and Pawlak, A.E., **2015**, The Hudson Bay Lithospheric Experiment (HuBLE): insights into Precambrian plate tectonics and the development of mantle keels, *Geological Society of London Special Publications*, doi: 10.1144/SP389.7 (Loan No:900)

6. Bishop, A., Denton, P., Pomeroy, P. and Twiss, S., **2015**, Good vibrations by the beach boys: magnitude of substrate vibrations is a reliable indicator of male grey seal size, *Animal Behaviour*, 100, pp74-82, doi: 10.1016/j.anbehav.2014.11.008 (Loan No:982)

7. Civiero, C., Hammond, J.O.S., Goes, S., Fishwick S, Ahmed, A., Ayele, A., Doubre, C., Goitom, B., Keir, D., Kendall, J.M., Leroy, S., Ogubazghi, G., Rumpker, G. and Stuart, G.W., **2015**, Multiple mantle upwellings in the transition zone beneath the northern East-African Rift system from relative P-wave travel-time tomography, *Geochemistry, Geophysics, Geosystems*, 16(9), pp2949-2968, doi: 10.1002/2015GC005948 (Loan No:873)

8. Conway, S.J., Balme, M.R., Kreslavsky, M.A., Murray, J.B. and Towner, M.C., **2015**, The comparison of topographic long profiles of gullies on Earth to gullies on Mars: A signal of water on Mars, *Icarus*, 253, pp189-204, doi: 10.1016/j.icarus.2015.03.009 (Loan No:871)

9. Coquin, J., Mercier, D., Bourgeois, O., Cossart, E. and Armelle, D., **2015**, Gravitational spreading of mountain ridges coeval with Late Weichselian deglaciation: impact on glacial landscapes in TrÃ¶llaskagi, northern Iceland, *Quaternary Science Reviews*, 107, pp197-213, doi: 10.1016/j.quascirev.2014.10.023 (Loan No:977)

10. Frederiksen, A.W., Thompson, D.A., Rost, S., Cornwell, D.G., Gulen, L., Houseman, G.A., Kahraman, M., Poyraz, S.A., Teoman, U.M., Turkelli, N. and Utkucu, M., **2015**, Crustal thickness variations and isostatic disequilibrium across the North Anatolian Fault, western Turkey, *Geophysical Research Letters*, doi: 10.1002/2014GL062401 (Loan No:947)

11. Goitom, B., Oppenheimer, C., Hammond, J.O.S., Grandin, R., Barnie, T., Donovan, A., Ogubazghi, G., Yohannes, E., Kibrom, G., Kendall, J.M., Carn, S.A., Fee, D., Sealing, C., Keir, D., Ayele, A., Blundy, J., Hamlyn, J., Wright, T. and Berhe, S., **2015**, First recorded eruption of

Nabro volcano, Eritrea, 2011, *Bulletin of Volcanology*, 77(10), doi: 10.1007/s00445-015-0966-3 (Loan No:953)

12. Goswami, B.K., Weitemeyer, K.A., Minshull, T.A., Sinha, M.C., Westbrook, G.K., Chabert, A., Henstock, T.J. and Ker, S., **2015**, A joint electromagnetic and seismic study of an active pockmark within the hydrate stability field at the Vestnesa Ridge, West Svalbard margin, *Journal of Geophysical Research Solid Earth*, 120(10), pp6797-6822, doi: 10.1002/2015JB012344

13. Green, R.G., Greenfield, T. and White, R.S., **2015**, Triggered earthquakes suppressed by an evolving stress shadow from a propagating dyke, *Nature Geoscience*, 8(8), doi: 10.1038/NGEO2491 (Loan No:968;1022)

14. Greenfield, T. and White, R.S., **2015**, Building icelandic igneous crust by repeated melt injections, *Journal of Geophysical Research Solid Earth*, 120(11), pp7771-7788, doi: 10.1002/2015JB012009 (Loan No:914;968)

15. Hart, J.K., Rose, K.C., Clayton, A. and Martinez, K., **2015**, Englacial and subglacial water flow at Skalafellsjokull, Iceland derived from ground penetrating radar, in situ Glacsweb probe and borehole water level measurements, *Earth Surface Processes and Landforms*, doi: 10.1002/esp.3783 (Loan No:935;961)

16. Hetenyi, G., Ren, Y., Dando, B., Stuart, G.W., Hegedus, E., Kovacs, A.C. and Houseman, G.A., **2015**, Crustal structure of the Pannonian Basin: The AlCaPa and Tisza Terrains and the Mid-Hungarian Zone, *Tectonophysics*, 646, pp106-116, doi: 10.1016/j.tecto.2015.02.004 (Loan No:883)

17. Johnson, N.E., Whaler, K.A., Hautot, S., Fisseha, S., Desissa, M. and Dawes, G.J.K., **2015**, Magma imaged magnetotellurically beneath an active and an inactive magmatic segment in Afar, Ethiopia, *Geological Society of London Special Publications*, doi: 10.1144/SP420.11 (Loan No:907)

18. Kahraman, M., Cornwell, D.G., Thompson, D.A., Rost, S., Houseman, G.A., Turkelli, N., Teoman, U., Altuncu Poyraz, S., Utkucu, M. and Gulen, L., **2015**, Crustal-scale shear zones and heterogeneous structure beneath the North Anatolian Fault Zone, Turkey, revealed by a high-density seismometer array, *Earth and Planetary Science Letters*, 430, pp129-139, doi: 10.1016/j.epsl.2015.08.014 (Loan No:947)

19. Keir, D., Bastow, I.D., Corti, G., Mazzarini, F. and Rooney, T.O., **2015**, The origin of along-rift variations in faulting and magmatism in the Ethiopian Rift, *Tectonics*, 34(3), pp464-477, doi: 10.1002/2014TC003698 (Loan No:956)

20. Kohler, A., Maupin, V. and Balling, N., **2015**, Surface wave tomography across the Sorgenfrei-Tornquist Zone, SW Scandinavia, using ambient noise and earthquake data, *Geophysical Journal International*, 203(1), pp284-311, doi: 10.1093/gji/ggv297 (Loan No:833)

21. Kolstrup, M.L., Hung, S.H. and Maupin, V., **2015**, Multiscale, finite-frequency P and S tomography of the upper mantle in the southwestern Fennoscandian Shield, *Geophysical Journal International*, 202(1), pp190-218, doi: 10.1093/gji/ggv130 (Loan No:833)

22. Korostelev, F., Cornelis, W., Leroy, S., Boschi, L., Keir, D., Ren, Y., Molinari, I., Ahmed, A., Stuart, G.W., Rolandone, F., Khanbari, K., Hammond, J.O.S., Kendall, J.M., Doubre, C., Al Ganad, I., Goitom, B. and Ayele, A., **2015**, Magmatism on rift flanks: Insights from ambient noise phase velocity in Afar region, *Geophysical Research Letters*, 42, pp2179-2188, doi: 10.1002/2015GL063259 (Loan No:873)

23. Korostelev, F., Leroy, S., Keir, D., Ahmed, A., Boschi, L., Rolandone, F., Stuart, G.W., Obrebski, M., Khanbari, K. and El-Hussain, I., **2015**, Upper mantle structure of the southern Arabian margin: Insights from teleseismic tomography, *Geosphere*, 11(5), pp1262-1278, doi: 10.1130/GES01159.1 (Loan No:873)

24. Leitao, P.J., Schwieder, M., Suess, S., Catry, I., Milton, E.J., Moreira, F., Osborne, P.E., Pinto, M.J., van der Linden, S. and Hostert, P., **2015**, Mapping beta diversity from space: Sparse Generalised Dissimliarity Modelling (SGDM) for analysing high-dimensional data, *Methods in Ecology and Evolution*, 6(7), pp764-771, doi: 10.1111/2041-210X.12378 (Loan No:954)

25. Motaghi, K., Tatar, M., Priestley, K., Romanelli, F., Doglioni, C. and Panza, G.F., **2015**, The deep structure of the Iranian Plateau, *Gondwana Research*, 28(1), pp407-418, doi: 10.1016/j.gr.2014.04.009 (Loan No:746)

26. Schuler, J., Greenfield, T., White, R.S., Roecker, S.W., Brandsdottir, B., Stock, J.M., Tarasewicz, J., Martens, H.R. and Pugh, D., **2015**, Seismic imaging of the shallow crust beneath the Krafla central volcano, NE Iceland, *Journal of Geophysical Research Solid Earth*, 120(10), pp7156-7173, doi: 10.1002/2015JB012350 (Loan No:891)

27. Schuler, J., White, R.S., Brandsdottir, B. and Tarasewicz, J., **2015**, Shallow geothermal and deep seismicity beneath Peistareykir, NE-Iceland, *Jokull*, 65, pp51-59 (Loan No:891;914)

28. Sigmundsson, F. et al., **2015**, Segmented lateral dyke growth in a rifting event at Bardarbunga volcanic system, Iceland, *Nature*, 517, pp191-195, doi: 10.1038/nature14111 (Loan No:980)

29. Smith, E.C., Smith, A.M., White, R.S., Brisbourne, A.M. and Pritchard, H.D., **2015**, Mapping the ice- bed interface characteristics of Rutford Ice Stream, West Antarctica, using microseismicity, *Journal of Geophysical Research Earth Surface*, 120, doi: 10.1002/2015JF003587 (Loan No:852)

30. Sundqvist, E., Molder, M., Crill, P., Kljun, N. and Lindroth, A., **2015**, Methane exchange in a boreal forest estimated by gradient method, *Tellus B*, 67, doi: 10.3402/tellusb.v67.26688 (Loan No:933)

31. Sundqvist, E., Persson, A., Kljun, N., Vestin, P., Chasmer, L., Hopkinson, C. and Lindroth, A., **2015**, Upscaling of methane exchange in a boreal forest using soil chamber measurements and high-resolution LiDAR elevation data, *Agricultural and Forest Meteorology*, 214, pp393-401, doi: 10.1016/j.agrformet.2015.09.003 (Loan No:933)

32. Thompson, D.A., Hammond, J.O.S., Kendall, J.M., Stuart, G.W., Helffrich, G.R., Keir, D., Ayele, A. and Goitom, B., **2015**, Hydrous upwelling across the mantle transition zone beneath the Afar Triple Junction, *Geochemistry, Geophysics, Geosystems*, 16, pp834-846, doi: 10.1002/2014GC005648 (Loan No:841)

33. Thomson, D.A., Kendall, J.M., Helffrich, G.R., Bastow, I.D., Wookey, J. and Snyder, D.B., **2015**, CAN-HK: An a Priori Crustal Model for the Canadian Shield, *Seismological Research Letters*, doi: 10.1785/0220150015 (Loan No:900;986)

34. Vann Jones, E.C., Rosser, N.J., Brain, M.J. and Petley, D.N., **2015**, Quantifying the environmental controls on erosion of a hard rock cliff, *Marine Geology*, 363, pp230-242, doi: 10.1016/j.margeo.2014.12.008 (Loan No:879)

35. Westwood, R.F., Styles, P. and Toon, S.M., **2015**, Seismic monitoring and vibrational characterization of small wind turbines: A case study of the potential effects on the Eskdalemuir International Monitoring System Station in Scotland, *Near Surface Geophysics*, 13(2), pp115-126, doi: 10.3997/1873-0604.2015001

36. Williams, R.D., Rennie, C.D., Brasington, J., Hicks, D.M. and Vericat, D., **2015**, Linking the spatial distribution of bed load transport to morphological change during high-flow events in a shallow braided river, *Journal of Geophysical Research Earth Surface*, 120(3), pp604-622, doi: 10.1002/2014JF003346 (Loan No:892)

37. Winter, K., Woodward, J., Ross, H., Dunning, S.A., Bingham, R.G., Corr, H.F.J. and Siegert, M.J., **2015**, Airborne radar evidence for tributary flow switching in Institute Ice Stream, West

Antarctica: Implications for ice sheet configuration and dynamics, *Journal of Geophysical Research Earth Surface*, doi: 10.1002/2015JF003518 (Loan No:838;870)

Conference Papers/Proceedings

1. Agustsdottir, T., Greenfield, T., Green, R.G., White, R.S., Brandsdottir, B., Steinthorsson, S. and Woods, J., **2015**, Seismicity caused by dyke propagation in the Bardarbunga volcanic system, NE Iceland, *Volcanic and Magmatic Studies Group, Norwich, UK* (Loan No:968;1022)

2. Agustsdottir, T., Greenfield, T., Green, R.G., White, R.S., Brandsdottir, B., Steinthorsson, S. and Woods, J., **2015**, Seismicity caused by dyke propagation in the Bardarbunga volcanic system, NE Iceland, *EGU, Vienna*, EGU2015-10277 (Loan No:968;1022)

3. Agustsdottir, T., Greenfield, T., Green, R.G., White, R.S., Woods, J., Brandsdottir, B. and Steinthorsson, S., **2015**, Seismicity caused by dike propagation in the BÃ¡rÃ°arbunga volcanic system, NE Iceland, *OVG-CVG meeting, Oxford, UK* (Loan No:968;1022)

4. Agustsdottir, T., Greenfield, T., Green, R.G., White, R.S., Woods, J., Brandsdottir, B. and Steinthorsson, S., **2015**, Seismicity caused by dike propagation in the BÃ¡rÃ°arbunga volcanic system, NE Iceland, *CDG meeting, Iceland* (Loan No:968;1022)

5. Agustsdottir, T., Woods, J., Greenfield, T., Green, R.G., White, R.S., Brandsdottir, B. and Steinthorsson, S., **2015**, Detailed Segmentation and Episodic Propagation of the 2014 Bardarbunga Dike Intrusion and Seismicity Accompanying the sustained Holuhraun Eruption, Central Iceland, *American Geophysical Union, Fall Meeting 2015, San Francisco* (Loan No:968;1022)

6. Boyce, A., Bastow, I., Darbyshire, F., Ellwood, A., Gilligan, A., Levin, V. and Menke, W., **2015**, P and S Wave Tomography of Southeast Canada: Insights into Mantle Development and Evolution from Archean to Phanerozoic Times, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:986)

7. Delf, R., Smith, A., Brisbourne, A., King, E., Clark, R. and Stuart, G., **2015**, Seismic Attenuation within the Ice of Pine Island Glacier, West Antarctica and Implications for Ice Dynamics, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:936)

8. Funnell, M.J., Peirce, C., Stratford, W.R., Watts, A.B. and Grevemeyer, I., **2015**, Crustal Structure and Flexural Characteristics of the Louisville Ridge and Tonga-Kermadec Subduction System, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK*

9. Green, R.G.:G.reenfield, T. and White, R.S., **2015**, Triggered seismicity induced by stresses from the Bardabunga 2014 rifting event, *EGU, Vienna* (Loan No:968;1022)

10. Green, R.G., Greenfield, T. and White, R.S., **2015**, Triggered earthquakes suppressed by an evolving stress shadow from a propagating dyke; Bardarbunga volcano, Iceland, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:968;1022)

11. Greenfield, T. and White, R.S., **2015**, Imaging magma plumbing beneath Askja volcano, Iceland, *EGU, Vienna* (Loan No:914;968)

12. Greenfield, T. and White, R.S., **2015**, Imaging magma plumbing beneath Askja volcano, Iceland, *American Geophysical Union, Fall Meeting 2015, San Francisco* (Loan No:914;968)

13. Iacovino, K., Song Kim, J.u, Sisson, T., Lowenstern, J., Nam Jang, J., Ho Song, K., Huan Ham, H., Hum Ri, K., Donovan, A., Oppenheimer, C., Hammond, J., Weber Liu, K. and Ran

Ryu, K., **2015**, New Constraints on the Geochemistry of the Millennium Eruption of Mount Paektu (Changbaishan), Democratic Peopleâ€™s Republic of Korea/China, *American Geophysical Union, Fall Meeting 2015, San Francisco*, V43B-3114 (Loan No:976)

14. Illsley-Kemp, F., Keir, D., Bull, J., Ayele, A., Hammond, J., Kendall, M., Gallacher, R., Gernon, T. and Goitom, B., **2015**, Seismicity of an Incipient Oceanic Spreading Centre in Northern Afar, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:956)

15. Johnson, J.H., White, R.S. and Roman, D., **2015**, Layered seismic anisotropy at Icelandic volcanoes: implications for crustal growth and consequences for shear wave splitting monitoring, *EGU, Vienna*, EGU2015-8960 (Loan No:968;1022)

16. Jonsdottir et al, **2015**, Real-time monitoring of seismicity and deformation during the Bardarbunga rifting event and associated caldera subsidence, *EGU, Vienna* (Loan No:968;1022)

17. Kasprak, A., Brasington, J., Hafen, K. and Wheaton, J., **2015**, An Efficient and Imperfect Model for Gravel-Bed Braided River Morphodynamics: Numerical Simulations as Exploratory Tools, *American Geophysical Union, Fall Meeting 2015, San Francisco*, EP51A-0907 (Loan No:892)

18. Liddell, M.V., Bastow, I., Rawlinson, N., Gilligan, A., Darbyshire, F. and Kendall, M., **2015**, Precambrian Processes, the Trans-Hudson Orogen, and Cratonic Keels: Insights from Teleseismic Tomography in Northern Hudson Bay, Canada, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:817;900)

19. Robinson, A.H., Peirce, C., Watts, A.B. and Grevemeyer, I., **2015**, Crustal and Upper Mantle Structure of the Louisville Ridge Seamount Chain, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK*

20. Rost, S., Cornwell, D., Thompson, D., Houseman, G., Kahraman, M., Teoman, U., Altuncu-Poyraz, S., Turkelli, N., Frederiksen, A., Rondenay, S. and Wright, T., **2015**, The crustal structure along the 1999 Izmit/Duzce rupture of the North-Anatolian Fault, *EGU, Vienna*, 17, EGU2015-9998 (Loan No:947)

21. Sigmundsson et al, **2015**, Contribution of the FUTUREVOLC project to the study of segmented lateral dyke growth in the 2014 rifting event at Bardarbunga volcanic system, Iceland, *EGU, Vienna*, EGU2015-11846 (Loan No:968;1022)

22. Sigmundsson et al, **2015**, Segmented lateral dyke growth in a rifting event at Bardarbunga volcanic system, Iceland, *EGU, Vienna*, EGU2015-10322 (Loan No:968;1022)

23. Smith,E.C., Smith, A.M., White, R.S., Kendall, M., Brisbourne, A.M. and Baird, A.F., **2015**, Sounds of the deep: Passive microseismic monitoring of the base of ice streams, *American Geophysical Union, Fall Meeting 2015, San Francisco* (Loan No:936)

24. Taylor, D., Rost, S. and Houseman, G., **2015**, Structure of the North Anatolian Fault Zone from the Auto-Correlation of Ambient Seismic Noise Recorded at a Dense Seismometer Array, *American Geophysical Union, Fall Meeting 2015, San Francisco*, S13A-2792 (Loan No:947)

25. Vann Jones, E., Rosser, N., Brain, M. and Varley, S., **2015**, The Influence of Ephemeral Beaches on Alongshore Variability of Hard-rock Cliff Erosion, *American Geophysical Union, Fall Meeting 2015, San Francisco*, EP23B-0978 (Loan No:985)

26. Vann Jones, E.C., Rosser, N.J. and Brain, M.J., **2015**, Using microseismics to explore alongshore wave energy transfer to coastal cliffs, *British Society for Geomorphology Annual Conference, Southampton, UK* (Loan No:985)

27. Wedmore, L.J., Walker, J.F., Roberts, G., Sammonds, P., McCaffrey, K. and Cowie, P., **2015**, Coulomb Stress Changes and Fault Interactions in the Central Apennines, Italy, Using a 660-year Record of Historical Earthquakes, *British Geophysical Association Postgraduate Research in Progress Meeting 2015, Southampton, UK* (Loan No:1034)

28. White, R.S., Agustsdottir, T., Greenfield, T., Green, R.G., Brandsdottir, B., Woods, J. and Pugh, D., **2015**, Failure mechanisms during melt injection along dykes in Iceland, *EGU, Vienna*, EGU2015-10851 (Loan No:968;1022)

29. White, R.S., Agustsdottir, T., Woods, J., Greenfield, T., Green, R., Brandsdottir, B. and Redfern, S., **2015**, Overview of Geophysical Constraints on the 2014 Bardarbunga - Holuhraun Eruption, Iceland, *Volcanic and Magmatic Studies Group, Norwich, UK* (Loan No:968;1022)

30. White, R.S., Woods, J., Agustsdottir, T., Green, R.G., Greenfield, T., Brandsdottir, B. and Redfern, S., **2015**, Why is Extension in the Northern Rift Zone of Iceland Accompanied Predominantly by Strike-slip Seismicity? , *American Geophysical Union, Fall Meeting 2015, San Francisco* (Loan No:968;1022)

31. Woods, J., Agustsdottir, T., Green, R.G., Greenfield, T., White, R.S., Redfern, S. and Brandsdottir, B., **2015**, Dyke propagation mechanisms and the immediate pre- and syn-eruptive seismicity of the 2014 Holuhraun fissure eruption, Iceland, *Volcanic and Magmatic Studies Group, Norwich, UK* (Loan No:968;1022)

32. Woods, J., Agustsdottir, T., Green, R.G., Greenfield, T., White, R.S., Redfern, S. and Brandsdottir, B., **2015**, Dyke propagation mechanisms and the immediate pre- and syn-eruptive seismicity of the 2014 Holuhraun fissure eruption, Iceland, *EGU, Vienna*, EGU2015-10420 (Loan No:968;1022)

33. Woods, J., Agustsdottir, T., White, R.S., Green, R.G., Greenfield, T., Brandsdottir, B., Steinthorsson, S. and Redfern, S., **2015**, Dike propagation mechanisms from seismicity accompanying the 2014 Bardarbunga-Holuhraun fissure eruption, Iceland, *American Geophysical Union, Fall Meeting 2015, San Francisco* (Loan No:968;1022)

PhD Theses

1. Bishop, A.M., **2015**, Behavioural mechanisms of conflict and conflict reduction in a wild breeding polygynous pinniped , *University of Durham*(Loan No:982)

2. Pugh, D., **2015**, Bayesian source inversion of microseismic events, *University of Cambridge*(Loan No:980)

3. Tedstone, A., **2015**, Hydrological controls on diurnal ice flow variability in a Greenland outlet glacier, *University of Edinburgh*(Loan No:868)