

List of publications in 2010 due to GEF equipment loans

Journal Articles

1. Acton, C.E., Priestley, K., Gaur, V.K. and Rai, S.S., **2010**, Group velocity tomography of the Indo-Eurasian collision zone, *Journal of Geophysical Research*, 115(B12335), p16, doi: 10.1029/2009JB007021 (Loan No:774)
2. Barrand, N.E., James, T.D. and Murray, T., **2010**, Spatiotemporal variability in elevation changes of two high-Arctic valley glaciers, *Journal of Glaciology*, 56(199), pp771-780 (Loan No:789)
3. Bartholomew, I., Nienow, P., Mair, D., Hubbard, A., King, M. and Sole, A., **2010**, Seasonal evolution of subglacial drainage and acceleration in a Greenland outlet glacier, *Nature Geoscience*, 3, pp408-411, doi: 10.1038/NCEO863 (Loan No:868)
4. Bastow, I.D., Pilidou, S., Kendall, J.-M. and Stuart, G., **2010**, Melt-induced seismic anisotropy and magma assisted rifting in Ethiopia: Evidence from surface waves, *Geochemistry, Geophysics, Geosystems*, 11(Q0AB05), p19, doi: 10.1029/2010GC003036 (Loan No:841)
5. Bastow, I.D., Thompson, D., Wookey, J., Kendall, J.-M., Helffrich, G., Snyder, D., Eaton, E. and Darbyshire, F., **2010**, Precambrian plate tectonics: Seismic evidence from Northern Hudson Bay, *Geology*, 39(1), pp91-94, doi: 10.1130/G31396.1 (Loan No:817; 900)
6. Basuyau, C., Tiberi, C., Leroy, S., Stuart, G., Al-Lazki, A., Al-Toubi, K. and Ebinger, C., **2010**, Evidence of partial melting beneath a continental margin: case of Dhofar, in the Northeast Gulf of Aden (Sultanate of Oman), *Geophysical Journal International*, 180, pp520-534, doi: 10.1111/j.1365-246X.2009.04438.x (Loan No:873)
7. Beutel, E., van Wijk, J., Ebinger, C., Keir, D. and Agostini, A., **2010**, Formation and stability of magmatic segments in the Main Ethiopian and Afar rifts, *Earth and Planetary Science Letters*, 293(3-4), pp225-235, doi: 10.1016/j.epsl.2010.02.006 (Loan No:683)
8. Cornwell, D.C., Maguire, P.K.H., England, R.W. and Stuart, G.W., **2010**, Imaging detailed crustal structure and magmatic intrusion across the Ethiopian Rift using a dense linear broadband array, *Geochemistry, Geophysics, Geosystems*, 11, doi: 10.1029/2009GC002637 (Loan No:765)
9. Cote, D.M., Belachew, M., Quillen, A.C., Ebinger, C.J., Keir, D., Ayele, A. and Wright, T., **2010**, Low frequency hybrid earthquakes near a magma chamber in Afar: quantifying path effects, *Bulletin of the Seismological Society of America*, 100, pp1892-1903, doi: 10.1785/0120090111 (Loan No:803)
10. Ebinger, C., Ayele, A., Keir, D., Rowland, J., Yirgu, G., Wright, T., Belachew, M. and Hamling, I., **2010**, Length and timescales of rift faulting and magma intrusion: the Afar rifting cycle from 2005 to present, *Annual Review of Earth and Planetary Sciences*, 38, pp437-464, doi: 10.1146/annurev-earth-040809-152333 (Loan No:803)
11. Fretwell, P.T., Hodgson, D.A., Watcham, E., Bentley, M.J. and Roberts, S.J., **2010**, Holocene isostatic uplift of the South Shetland Islands, Antarctic Peninsula, modelled from raised beaches, *Quaternary Science Reviews*, 29, pp1880-1893 (Loan No:826; 849)
12. Gaulton, R. and Malthus, T.J., **2010**, LiDAR mapping of canopy gaps in continuous cover forests: A comparison of canopy height model and point cloud based techniques, *International Journal of Remote Sensing*, pp1193-1211, doi: 10.1080/01431160903380565 (Loan No:821)
13. Grevemeyer, I., Helffrich, G., Faria, B., Booth-Rea, G., Schnabel, M. and Weinrebe, W., **2010**, Seismic activity at Cadamosto seamount near Fogo Island, Cape Verde - formation of a new

- ocean island?, *Geophysical Journal International*, 180, pp552-558, doi: 10.1111/j.1365-246X.2009.04440.x (Loan No:703)
14. Hammond, J.O.S., Kendall, J.-M., Angus, D. and Wookey, J., **2010**, Interpreting spatial variations in anisotropy: insights into the Main Ethiopian Rift from SKS waveform modelling, *Geophysical Journal International*, 181(3), pp1701-1712, doi: 10.1111/j.1365-246X.2010.04587.x (Loan No:765)
 15. Helffrich, G., Faria, B., Fonseca, J., Lodge, A. and Kaneshima, S., **2010**, Transition zone structure under a stationary hot spot: Cape Verde, *Earth and Planetary Science Letters*, 289, pp156-161, doi: 10.1016/j.epsl.2009.11.001 (Loan No:703)
 16. Jansen, D., Kulesa, B., Sammonds, P.R., Luckman, A., King, E.C. and Glasser, N.F., **2010**, Present stability of the Larsen C ice shelf, Antarctic Peninsula, *Journal of Glaciology*, 56(198), pp593-600, doi: 10.3189/002214310793146223 (Loan No:863; 864)
 17. King, M.A., Murray, T. and Smith, A.M., **2010**, Non-linear responses of Rutford Ice Stream, Antarctica, to semi-diurnal and diurnal tidal forcing, *Journal of Glaciology*, 56(195), pp167-176, doi: 10.3189/002214310791190848 (Loan No:887)
 18. Lange, D., Tilmann, F., Rietbrock, A., Collings, R., Natawidjaja, D.H., Suwargadi, B.W., Barton, P., Henstock, T. and Ryberg, T., **2010**, The fine structure of the subducted investigator fracture zone in western Sumatra as seen by local seismicity, *Earth and Planetary Science Letters*, 298(1-2), pp47-56, doi: 10.1016/j.epsl.2010.07.020 (Loan No:828)
 19. Leitao, P.J., Moreira, F. and Osborne, P.E., **2010**, Breeding habitat selection by steppe birds in Castro Verde: a remote sensing and advanced statistics approach, *Ardeola*, 57 (Especial), pp93-116 (Loan No:819)
 20. Leroy, S., Lucazeau, F., d'Acremont, D., Watremez, L., Autin, J., Rouzo, S., Bellahsen, N., Tiberi, C., Ebinger, C., Beslier, M., Perrot, J., Razin, P., Rolandone, F., Sloan, H., Stuart, G., Al-Lazki, A., Al Toubi, K., Bache, F., Bonneville, A., Goutorbe, B., Huchon, P., Unternehr, P. and Khanbari, K., **2010**, Contrasted styles of rifting in the eastern Gulf of Aden: a combined wide-angle, MCS and Heat flow survey, *Geochemistry, Geophysics, Geosystems*, 11, Q07004, doi: 10.1029/2009GC002963 (Loan No:873)
 21. Lorinczi, P. and Houseman, G.A., **2010**, Geodynamical models of lithospheric deformation, rotation and extension of the Pannonian Basin of Central Europe, *Tectonophysics*, 492, pp73-87, doi: 10.1016/j.tecto.2010.05.007 (Loan No:795)
 22. McCloskey, J., Lange, D., Tilmann, F., Nalbant, S.S., Bell, A.F., Hilman Natawidjaja, D. and Rietbrock, A., **2010**, The September 2009 Padang earthquake, *Nature Geoscience*, 3(2), pp70-71, doi: 10.1038/ngeo753 (Loan No:828; 858)
 23. Plaza-Faverola, A., Westbrook, G.K., Ker, S., Exley, R.J.K., Gailler, A., Minshull, T.A. and Broto, K., **2010**, Evidence from three-dimensional seismic tomography for a substantial accumulation of gas hydrate in a fluid-escape chimney in the Nyegga pockmark field, offshore Norway, *Journal of Geophysical Research*, 115, B08104, doi: 10.1029/2009JB007078
 24. Radjaee, A., Rham, D., Mokhtari, M., Tatar, M., Priestley, K. and Hatzfeld, D., **2010**, Variation of Moho depth in the central part of the Alborz Mountains, northern Iran, *Geophysical Journal International*, 181, pp73-184, doi: 10.1111/j.1365-246X.2010.04518.x (Loan No:746)
 25. Scott, J.B.T., Smith, A.M., Bingham, R.G., Vaughan, D.G. and , **2010**, Crevasses triggered on Pine Island Glacier, West Antarctica, by drilling through and exceptional melt layer, *Annals of Glaciology*, 51, pp65-70, doi: 10.3189/172756410791392763 (Loan No:887)
 26. Shalev, E., Kenedi, C.L., Malin, P., Voight, B., Miller, V., Hidayat, D., Sparks, R.S.J., Minshull, T.A., Paulatto, M., Brown, L. and Mattioli, G., **2010**, 3-D seismic velocity tomography of

Montserrat from the SEA-CALIPSO offshore/onshore experiment, *Geophysical Research Letters*, 37, L00E17, doi: 10.1029/2010GL042498

27. Soosalu, H., Key, J., White, R.S., Knox, C., Einarsson, P. and Jakobsdottir, S.S., **2010**, Lower-crustal earthquakes caused by magma movement beneath Askja volcano on the north Iceland rift, *Bulletin of Volcanology*, 72(1), pp55-62, doi: 10.1007/s00445-009-0297-3 (Loan No:857)
28. Thompson, D., Bastow, I.D., Kendall, J.-M., Helffrich, G., Wookey, J., Snyder, D. and Eaton, D., **2010**, Precambrian crustal evolution: Seismic constraints from the Canadian shield, *Earth and Planetary Science Letters*, 297(3-4), pp655-666, doi: 10.1016/j.epsl.2010.07.021 (Loan No:817; 900)
29. Tilmann, F., Craig, T.J., Grevemeyer, I., Suwargadi, B., Kopp, H. and Flueh, W., **2010**, The updip seismic/aseismic transition of the Sumatra megathrust illuminated by aftershocks of the 2004 Aceh-Andaman and 2005 Nias events, *Geophysical Journal International*, 181(3), pp1261-1274, doi: 10.1111/j.1365-246X.2010.04597.x (Loan No:800)
30. Woodward, J., Smith, A.M., Ross, N., Thoma, M., Corr, H.F.J., King, E.C., King, M., Grosfeld, K., Tranter, M. and Siegert, M.J., **2010**, Location for direct access to Subglacial Lake Ellsworth: An assessment of geophysical data and modelling, *Geophysical Research Letters*, 37, L11501, doi: 10.1029/2010GL042884 (Loan No:838; 870)
31. Yang, Y., Zheng, Y., Chen, J., Zhou, S., Celyan, S., Sandvol, E., Tilmann, F., Priestley, K., Hearn, T.M., Ni, J.F., Brown, L.D. and Ritzwoller, M.H., **2010**, Rayleigh wave phase velocity maps of Tibet and the surrounding regions from ambient seismic noise tomography, *Geochemistry, Geophysics, Geosystems*, 11, Q08010, doi: 10.1029/2010GC003119 (Loan No:769)

Conference Papers/Proceedings

1. Baez, J., Bataille, K., Tassara, A., Bevis, M.G., Kendrick, E.C., Vigny, C., Brooks, B.A., Smalley, R., Ryder, I.M., Parra, H., Moreno, M., Melnick, D., Barrientos, S.E. and Blume, F., **2010**, Co- and Post-seismic surface deformation produced by the Maule Earthquake as observed by a dense network of continuous GPS stations, *American Geophysical Union, Fall Meeting 2010*, Abstract G33A-083 (Loan No:922)
2. Bevis, M.G., Brooks, B.A., Smalley, R., Baez, J.C., Parra, H., Kendrick, E.C., Foster, J.H., Blanco, M., Simons, M., Caccamise, D., Genrich, J.F., Sladen, A., Melnick, D., Moreno, M., Cimbaro, S., Ryder, I.M., Wang, K., Bataille, K., Cassasa, G., Klotz, J., Folguera, A., Tong, X. and Sandwell, D.T., **2010**, The 2010 (M 8.8) Maule, Chile Earthquake: An Overview of the Emergency Geodetic Response and Some of its Early Findings, *American Geophysical Union, Fall Meeting 2010*, Abstract U21B-04 (Loan No:922)
3. Carling, P.A., Bristow, C.S., Litvinov, A. and Nield, J.M., **2010**, Ground Penetrating Radar Stratigraphy of Megaflood Gravel Dunes, *American Geophysical Union, Fall Meeting 2010*, Abstract EP21C-0757 (Loan No:931)
4. Conway, S.J., Balme, M.R., Murray, J.B. and Towner, M.C., **2010**, Quantitative analysis of gully long profiles on Earth and Mars, *European Geosciences Union General Assembly, Vienna, Austria*, (Poster) (Loan No:871)
5. del Potro, R., Gottsmann, J., Camacho, A., Muir, D. and Sunagua, M., **2010**, Gravity anomaly of a deep active intrusion beneath Uturuncu volcano in the central Andes, *American Geophysical Union, Fall Meeting 2010*, Abstract G23C-0849 (Loan No:910; 928)
6. del Potro, R., Gottsmann, J., Camacho, A. and Sunagua, M., **2010**, Gravity signature of a large active intrusion in the central Andes, *Geophysical Research Abstracts, EGU General Assembly*, 12, EGU2010-11220 (Loan No:910)

7. Gourmelen, N., Shepherd, A., Jenkins, A., McMillan, M., Palmer, S. and King, M., **2010**, Basal melt rate at the Larsen-C Ice Shelf, *EGU, Vienna* (Loan No:881)
8. Gourmelen, N., Shepherd, A., Jenkins, A., McMillan, M., Palmer, S. and King, M., **2010**, Basal melt rate at the Larsen-C Ice Shelf, *IPY Conference, Oslo* (Loan No:881)
9. Gourmelen, N., Shepherd, A., McMillan, M., Jenkins, A. and King, M., **2010**, Summer basal melt rate at the Larsen-C ice shelf, Antarctic Peninsula, measured by phase sensitive radar, *American Geophysical Union, Fall Meeting 2010* (Loan No:906)
10. Gourmelen, N., Shepherd, A., McMillan, M., Palmer, S., Jenkins, A., Roseheim, B., Leeson, A., Williams, E. and King, M., **2010**, Isolating the Larsen-C ice shelf mass instability, *9th Antarctic Funding Initiative Workshop, Cambridge, UK, British Antarctic Survey* (Loan No:906)
11. Henstock, T., McNeill, L., Dean, S., Barton, P., Tilmann, F., Rietbrock, A., Robinson, D., Gulick, S., Austin, J., Djajadihardja, Y., Natawidjaja, D., Permana, H., Bonneville, A., Lucazeau, F. and Weber, M., **2010**, Exploring Structural Controls on Sumatran Earthquakes, *EOS, Transactions, AGU, 91(44)*, pp405-406 (Loan No:828)
12. Jansen, D., Kulesa, B., Luckman, A., King, E.C. and Sammonds, P.R., **2010**, Marine ice within the Larsen C ice shelf and its implication for stress distribution, *24th International Forum for Research into Ice Shelf Processes (FRISP), Bad Bederkesa, Germany* (Loan No:863; 864)
13. Jansen, D., Kulesa, B., Luckman, A., King, E.C. and Sammonds, P.R., **2010**, Marine ice within the Larsen C ice shelf and its implication for ice shelf velocity, *6th International Workshop on Antarctic Peninsula Climate Change, Leeds, UK, July 2010* (Loan No:863; 864)
14. Jansen, D., Kulesa, B., Sammonds, P.R., Luckman, A., King, E.C. and Glasser, N.F., **2010**, Flow, fracture and modelled present stabilities of the Larsen C and northernmost Larsen D ice shelves, *Geophysical Research Abstracts, EGU General Assembly, May 2010* (Loan No:863; 864)
15. Jones, G.A., Kulesa, B., Doyle, S., Dow, C.F. and Hubbard, A., **2010**, Accurate seismic phase identification and arrival time picking of glacial icequakes, *EOS, Transactions, AGU, Fall Meet. Suppl.* (Loan No:875)
16. Key, J., Soosalu, H. and White, R.S., **2010**, Seismicity beneath the Askja volcanic system, central Iceland, indicating multiple centres of melt injection from the mantle in a single spreading segment, *Magma Emplacement and Storage in the Earth's Crust, Geological Society, London, 11-12 February 2010* (Loan No:857)
17. Key, J., Soosalu, H., White, R.S. and Jakobsdottir, S.S. , **2010**, Lower crustal earthquakes at Askja volcano, Iceland: multi-location melt supply from the mantle within a single volcanic system, *ESC Working Group, Combining Stochastic and Deterministic Models to Characterise Seismo-Volcanic Source Processes, 18-25 Sept 2010* (Loan No:857)
18. Kulesa, B., Jansen, D., King, E.C., Luckman, A., Sammonds, P.R., Barrett, B.E. and King, M.A., **2010**, Present and future stability of the Larsen C ice shelf (SOLIS), *9th Antarctic Funding Initiative Workshop, Cambridge, UK, British Antarctic Survey, Sep 2010* (Loan No:863; 864)
19. Kulesa, B., King, E.C., Barrett, B.E., Jansen, D., Luckman, A.J. and Sammonds, P., **2010**, Joint inversion of multi-component seismic and ground-penetrating radar (GPR) data for ice-physical properties, and application to the Larsen C ice shelf, *EOS, Transactions, AGU, Fall Meet. Suppl., Abstract C21A-0509* (Loan No:863; 864)
20. Leitao, P.J., Moreira, F. and Osborne, P.E., **2010**, Using multi-source remote sensing data for describing steppe bird landscape requirements in the Castro Verde SPA, Portugal, *Bird*

Numbers 2010: Monitoring, indicators and targets - 18th International Conference of the European Bird Census Council, Caceres, Spain (Loan No:819)

21. Martens, H.R., White, R.S., Drew, J., Key, J., Soosalu, H. and Jakobsdottir, S.S., **2010**, Melt movement along a dyke at Upptyppingar, north-east Iceland, *Magma Emplacement and Storage in the Earth's Crust, Geological Society, London, 11-12 February 2010* (Loan No:842)
22. Minshull, T.A., Sarkar, S., Chabert, A., Westbrook, G.K. and Berndt, C., **2010**, Evidence for subsurface methane from high-resolution reflection and wide-angle seismic data offshore Svalbard, *Geophysical Research Abstracts, EGU General Assembly, 12, EGU2010-10408*
23. Palmer, S.J., Shepherd, A., Gourmelen, N., McMillan, M. and Hill, A., **2010**, Near-surface density variations at the Larsen-C ice shelf derived from neutron scattering measurement, *American Geophysical Union, Fall Meeting 2010, Poster (C41A-0502)* (Loan No:881; 906)
24. Paulatto, M., Annen, C., Henstock, T.J., Kiddle, E.J., Minshull, T.A., Sparks, R.S.J. and Voight, B., **2010**, 3D image of an active magma chamber beneath Montserrat, Lesser Antilles, from first-arrival travel-time tomography, *EOS, Transactions, AGU, Fall Meet. Suppl., Abstract V51F-01*
25. Paulatto, M., Minshull, T.A., Henstock, T.J. and the SEA-CALIPSO Team, **2010**, Probing the interior of an active volcano: 3D seismic tomography at Montserrat, *Geophysical Research Abstracts, EGU General Assembly, 12, EGU2010-9376*
26. Plaza-Faverola, A., Westbrook, G.K., Ker, S., Exley, R.J.K., Gailler, A., Minshull, T.A. and Broto, K., **2010**, Evidence from 3D seismic tomography for hydrate accumulation in a fluid-escape chimney in the Nyegga area on the Voring plateau, *Geophysical Research Abstracts, EGU General Assembly, 12, EGU2010-4341-1*
27. Ren, Y., Stuart, G.W., Houseman, G.A. and the Carpathian Basins Project Working Group, **2010**, Crustal structure of the Pannonian- Carpathian region, Central Europe, from ambient noise tomography, *American Geophysical Union, Fall Meeting 2010, Abstract S33A-2062* (Loan No:795)
28. Ross, N., Siegert, M.J., Corr, H.F.J., Smith, A.M., Woodward, J., Hindmarsh, R.C., King, E.C., Vaughan, D.G., Bentley, M., Rivera, A. and DeConto, R., **2010**, Stable Holocene ice flow in interior West Antarctica: evidence from the ice divide of Pine Island Glacier, *International Glaciological Conference VICC 2010, Ice and Climate Change: a View from the South, Valdivia, Chile, February 2010* (Loan No:838)
29. Ryder, I., Rietbrock, A., Bevis, M., Baez, J.C., Barrientos, S., Bataille, K., Parra, H. and Brooks, B., **2010**, Postseismic investigation of the February 2010 Chile Earthquake: Relaxation processes and the relationship of seismic and aseismic activity, *American Geophysical Union, Fall Meeting 2010, Abstract G33A-0821* (Loan No:922)
30. Tarasewicz, J., White, R.S. and Brandsdottir, B., **2010**, Imaging the magma chamber under Krafla, NE Iceland, *Magma Emplacement and Storage in the Earth's Crust, Geological Society, London, 11-12 February 2010* (Loan No:857)
31. Thompson, S., Kulesa, B. and Luckman, A., **2010**, Hydrogeophysical characterisation of ice-marginal moraines, with reference to moraine dam stability, Miage Glacial Lake, Italy, *EOS, Transactions, AGU, Fall Meet. Suppl.* (Loan No:926)
32. Voight, B., Sparks, R.S.J., Hammond, J., Shalev, E., Malin, P., Kenedi, C., Minshull, T.A., Paulatto, M., Mattioli, G., Hidayat, D. and Widiwijayanti, C., **2010**, Active-source seismic experiment peers under Soufriere Hills Volcano, *EOS, Transactions, AGU, 91, pp245-246*
33. White, R.S., Drew, J., Martens, H., Key, J., Soosalu, H. and Jakobsdottir, S.S., **2010**, Imaging Lower Crustal Intrusion in Iceland using Microseismics, *EOS, Transactions, AGU, Fall Meet. Suppl., Abstract V21F-08* (Loan No:857)

34. White, R.S., Drew, J., Martens, H.R., Eilon, Z., Soosalu, H., Key, J. and Jakobsdottir, S.S., **2010**, Anatomy of dyke intrusion at 15 -18 km depth beneath Upptyppingar, north Iceland, *Magma Emplacement and Storage in the Earth's Crust*, Geological Society, London, 11-12 February 2010 (Loan No:842)

PhD Theses

1. Basuyau, C., **2010**, Inversion conjointe Fonctions recepteur - Gravimetrie - Tomographie telesismique: Developpement et Applications, *Universite Pierre et Marie Curie - Paris VI*(Loan No:873)
2. Conway, S., **2010**, Debris flows on Earth and Mars, *The Open University*(Loan No:871)
3. Dando, B.D.E., **2010**, Seismological structure of the Carpathian-Pannonian region of central Europe, *University of Leeds*(Loan No:883)
4. Drew, J., **2010**, Coalescence Microseismic Mapping: an Imaging Method for the Detection and Location of Seismic Events, *University of Cambridge*(Loan No:857)
5. Latif, Z.A., **2010**, Modelling microclimates in broadleaved deciduous forests using remotely-sensed data , *University of Lancaster*(Loan No:877)
6. Wang, J., **2010**, Multi-Channel Wiener Filters and Application to Seismic Array Data, *University of Cambridge*(Loan No:744)