Professor Richard Thomas Walker

Department of Earth Sciences, University of Oxford, South Parks Road, Oxford, OX1 3AN

Telephone: +44-1865-282115
E-mail: richard.walker@earth.ox.ac.uk

Department website: https://www.earth.ox.ac.uk/people/richard-walker/
St Edmund Hall: https://www.seh.ox.ac.uk/people/richard-walker
Earthquake Geology and Geodesy Group: https://www.earth.ox.ac.uk/research-groups/earthquake-geology-and-geodesy/
Eastern Mediterranean Research Group: https://www.earth.ox.ac.uk/research-groups/emerg-eastern-mediterranean-research-group/
Earthquakes without Frontiers: http://ewf.nerc.ac.uk/
COMET: http://comet.nerc.ac.uk/

Professional Experience

2015-present: Professor in Earth Science, Dept. of Earth Sciences, Oxford University

2013-2015: Associate Professor in Active Tectonics, Dept. of Earth Sciences, Oxford University

2007-2015: Royal Society University Research Fellow, Dept. of Earth Sciences, Oxford University

2004-2007: NERC Post-doctoral Research Fellow, Dept. of Earth Sciences, Oxford University

2003-2004: Post-doctoral research in active tectonics, Bullard Laboratories, Cambridge University

College Positions

2013-present: Oxburgh Fellow and Tutor in Earth Sciences at St. Edmund Hall, Oxford

2010-2013: Fellow by Special Election at St. Edmund Hall, Oxford

2008-2010: Research Fellow at Wolfson College, Oxford

Academic Qualifications

1999-2003: Bullard Laboratories, Cambridge University. Ph.D. 'Active Tectonics of Eastern Iran'
Supervisor: Prof. James A. Jackson

1998-1999: Dept. of Earth Sciences, Leeds University. M.Sc. in Exploration Geophysics (with distinction)

1995-1998: Exeter College, Oxford University. B.A. Honours in Earth Sciences (1st class)

Honours and Awards

2015: Awarded the title of Professor in the Oxford University 'Recognition of Distinction' exercise

2012: Observatoire des Sciences de l'Univers de Grenoble Visiting Fellowship

2012: Royal Society University Research Fellowship extension

2011: Royal Geographical Society Oman-Thesiger Fellowship

2008: Japan Society for the Promotion of Science Short-term Award

2008: Oxford University Teaching Excellence Award

2007: Royal Society University Research Fellowship (aimed at outstanding scientists at an early to mid-stage of their career with potential to become leaders in their field)

2006: Geological Society President's Award (Notable early contribution by a scientist under the age of 30)

2004: NERC Postdoctoral Fellowship (awarded to outstanding early career environmental scientists)

1999: Natural Environment Research Council (NERC) doctoral studentship

1999: Schlumberger Bursary for doctoral research

1998: CONOCO industrial MSc scholarship

1998: Exeter College Fitzgerald prize (for 1st class degree result)

1998: Dept. of Earth Sciences Burdett-Coutts prize (overall highest performance in final examinations)

Research Grants

In review: Earthquake hazard and environmental securitry in Kazakhstan and Kyrgyzstan, PI, NATO Science for Peace and Security, **€299.946**

2019-20: Embedding analysis of seismic hazard and risk for improved welfare in Bishkek, Kyrgyzstan, Co-PI, NERC Innovation, **£115,684** (split between Leeds and Oxford)

2019-23: The Earthquake Ruptures of Iran and Central Asia (EROICA), PI, Leverhulme Trust, **£359,347**

2019-22: Neotectonics, Earthquakes, Palaeoseismology, and Tsunami of the Eastern Mediterranean (NEPTUNE), PI, Leverhulme Trust, **£214,933**

2018: Submarine earthquakes and tsunami: an integrated approach, PI, John Fell OUP Research Fund, **£31,500**

2016-19: Seismo-tectonics in Ningxia, Gansu and Shaanxi (STINGS), NERC-ESRC Increasing Resilience to Natural Hazards Program, Co-PI – with responsibility for running field program in China, **£500,000** (split across several institutions)

2016-19: Pan-participatory Assessment and Governance of Earthquake Risks in the Ordos Area (PAGER-O), NERC-ESRC Increasing Resilience to Natural Hazards Program, Co-PI – with responsibility for geological investigation of historic earthquake sources, **£500,000** (split across several institutions)

2016-18: Palaeoseismology, Active tectonics, and Archaeoseismology of Cuzco, Peru (CUZCO-PATA), UK partner in a call for linking Peru and UK research, NSF of Peru, **~$120,000** (funds held by Peru partner)

2016: Bid for European Regional Development Fund (ERDF) for assessing seismic hazards in Republic of Croatia, PI, Oxford University Knowledge Exchange Seed Fund, **£2,500**

2014-19: Looking Into the Continents from Space (LICS), Co-PI – with responsibility for large-scale mapping of active fault sources (remote-sensing and field verification) across interior of Asia, NERC Large Grant, **£1,200,000** (split across several institutions)

2014-17: Climatic, environmental and tectonic influences on prehistoric human development in Iran, PI – Overall responsibility for project, Leverhulme Trust, **£176,559**

2012-17: Earthquakes without Frontiers (EWF): a partnership for increasing resilience to seismic hazard in the continents. Within the consortia I had responsibility for running large research programs into active faulting in China, Kazakhstan & Kyrgyzstan, NERC Increasing Resilience to Natural Hazards Program, **£3,000,000** (split across several institutions)

2012-15: An international Partnership for Collaboration and training in Earth Hazard and Mitigation in the Alpine-Himalayan Belt and Central Asia, Co-PI – provided funding for workshops and for training visits for international partners to visit the UK. NERC International Opportunities Fund, **£207,837** (split across several institutions)

2012-14: The timing and cause of mountain-building in central Asia, PI – I was sole investigator on the project, NERC Small Grant, **£29,043**

2011: Active faulting and mountain building in Kazakhstan, PI – seed funding for initial research trip to Kazakhstan, Support from the Royal Society, the Geological Society of London, the Linnean Society, the Gilchrist Educational Trust, the Earth & Space Foundation (total **£6026**)

2011: Ten thousand years of environmental change and human habitation in northeast Iran, PI – the grant allowed initial fieldwork and sample analysis leading to my successful Leverhulme Trust bid, Royal Geographical Society Oman-Thesiger Fellowship, **£7500**

2009-10: Determining the extent, timing, and cause of Quaternary uplift along the Atlantic coast of Africa and Iberia, PI – Overall responsibility for project. The grant covered fieldwork and analytical costs, Royal Society, **£50,000**

2009: Genetic dating of mountain building in Mongolia, British Council Darwin Now, **£5000**

2008-11: The rates of faulting in NE Iran, Co-PI, as I was ineligible for joint-PI status at this time – This grant covered the salary of my colleague Dr. Morteza Fattahi in the OUCE, mentored by Prof. David Thomas. The award allowed us to undertake a country-wide reconnaissance study of the rates of active faulting, as well as developing an initial framework of late Quaternary landscape evolution in Iran, Leverhulme Trust, **£133,617**

2006: Mountain-Building in NE Iran, Co-PI, Royal Geographical Society Oman-Thesiger Fellowship, **£8,000**

2006: Viscosity of the lower crust of Tibet, PI – in joint lead with Prof. Philip England, Oxford. This grant paid for fieldwork in Tibet to measure lake shoreline elevations, which allowed us to investigate the physical properties of the Tibetan lower crust, Royal Society, **£10,000**

2005: Luminescence dating of Iranian faults, PI – Seed funding for an initial study of fault slip-rates in Iran, Royal Society, **£4111**

2004: Active tectonics of the Northern Altay Mts. Mongolia, PI – Seed funding for an initial field visit to Mongolia, Royal Society, **£1000**

I have also received support in kind through multiple successful PI applications to the NERC Cosmogenic Isotope Analysis and Radiocarbon facilities, and the European Space Agency and Digital Globe Foundation for no-cost satellite imagery. I am an investigator in the COMET consortium (Centre for the Observation and Modelling of Earthquakes, Volcanoes, and Tectonics), which provides support for small projects, as well as providing leverage for larger ones.

Academic citizenship

Convening/Organizing meetings

- Co-organiser (with Christoph Grutzner) of 2nd International workshop on the Tien Shan, Jena (October 2018)
- Co-organiser of EWF workshop and organiser of fieldtrip on earthquake hazard in Central Asia, Almaty, Kazakhstan (July 2016)
- Co-organiser of EWF workshop on earthquake hazard in Tehran, Iran (February 2016)
- Organiser of international workshop on the Tien Shan, Oxford (November 2015)
- Co-organiser of discussion meeting as the Royal Astronomical Society (March 2015)

- Convener of session at the European Geoscientists Union in Vienna (April 2014)
- Convenor of Dept. of Earth Sciences weekly seminar series (2006-2007)
- Organiser/Convenor of meeting in Oxford on Quaternary dating in active tectonics (2005)

Editorships of Learned Journals

- Guest Editor for a special section of the Journal of Asian Earth Sciences on the 2008 Wenchuan earthquake in China

Appointments to National/International Bodies

- Member of the Royal Society's International Travel Grant and Newton International Fellowship review panels (2012-2017)
- Member of the NERC Peer Review College
- Reviewer for international research councils, including: National Science Foundation (USA), Volkswagon Institute (Germany), Agence Nationale de la Recherche (France).
- Member of the INQUA international research consortium SURE (Surface Rupture Database)

University Service

University

2017-present: MPLS Divisional Graduate School Committee
2017-present: MPLS Divisional Funding Panel

Department

2017-present: Director of Graduate Studies (2017-present)
2017-present: Member of Management Committee (2017-present)
2012-17: Deputy Director of Graduate Studies (2012-2017)
2012-present: Member of Teaching Committee (2012-present)
2012-present: Member of Tutors committee (2012-present)
2010-present: Member of Department Committee (2010-present)
2007-08: Member of Environment Committee (2007-8)
2006-07: Organiser of the weekly Departmental seminar series (2006-7)

College

2019: Academic Committee
2017-18: Disciplinary Committee
2014-17: Academic Committee
2013-14: Finance Committee
2011-14 Disciplinary Committee
2010-13 Development Committee
2010-present: Governing Body of St. Edmund Hall

Present Undergraduate teaching profile

4th year Fieldtrip to examine active volcanic and faulting in Greece.
2nd year Remote sensing and Active Tectonics

2nd year Structural Geology and Maps

Invited talks at international conferences

2020 Hokudan International Symposium on Active Faulting, Awaji Island, Japan.
2019 EGU Vienna.
2017 4th Oxford Deserts Conference.
2012 AGU Fall Meeting, San Francisco.
2011 EGU Vienna.
2009 GSA Annual Meeting Portland, Oregon.
2005 Hokudan International Symposium on Active Faulting, Awaji Island, Japan.

Invited research seminars

I have been an invited attendee at international workshops on earthquake hazard in France, Turkey, Kazakhstan, Kyrgyzstan, Mongolia, and Spain. I have given numerous invited seminars at a range of university departments and research institutes, including (since January 2012): Birmingham, Cambridge (four times), Cardiff, OU Milton Keynes, Oxford, Plymouth, IPG Paris, University Joseph-Fourier Grenoble, University of Montpellier II, University of Potsdam, University Roma 3, National Institute of Geophysics and Volcanology (INGV) in Rome, Vietnam Academy of Sciences Hanoi, China Earthquake Administration Beijing, Institute of Geophysical Research Almaty Kazakhstan, Geological Survey of Iran, National Academy of Sciences Turkmenistan.

Contributions to the Public Understanding of Science

I have written popular science articles for the Metro newspaper (Greater London circulation), the Oxford Earth Sciences Magazine, the St. Edmund Hall Magazine, and Geoscientist Magazine (the magazine of the Geological Society of London). I have given interviews on earthquake hazard for UK national (BBC Radio 4) and international (BBC World Service) radio programmes and have been interviewed for the BBC News Website. I am well-known as a public speaker, and have given numerous invited public lectures.

Expert Consultancy

My expertise in earthquake science is recognised through my inclusion in a successful bid for a World Bank project to produce a seismic hazard model for the Kyrgyz Republic. The project was led by ARUP Engineering, and included specialists from the UK, Germany, and Kyrgyzstan. The project ran for 18 months from January 2015.

List of Doctoral students supervised

2019- Roberta Wilkinson, Oxford, “Active tectonics and seismic hazard in central Asia”
2018- Wendy Tsai, Oxford, “Earthquake occurrence in Intraplate settings”
2017- John Dale Dianala, Oxford, “Active tectonics and earthquakes of the Phillippines”

2016- Nick Dodds, Oxford, “Remote-sensing and field measurements of the earthquake cycle”

2016- Qi Ou, Oxford, “Earthquakes and active tectonics in central China”

2014 –2018 Eleanor Ainsworth, Oxford, “Field and remote-sensing studies of the earthquakes cycle”

2012 – 2016 David Mackenzie, Oxford, “Active continental shortening in Turkey and Kazakhstan”, Joint-lead supervisor with Prof. Barry Parsons (Oxford) (now working in remote sensing industry)

2012 – 2016 Tim Middleton, Oxford, “Active Tectonics of the Ordos region, NE China”, Joint-lead supervisor with Prof. Barry Parsons (Oxford) (in further study in theology)

2012 – 2016 Yu Zhou, Oxford, “Use of high-resolution optical satellite imagery in active tectonic studies”, Joint-lead supervisor with Prof. Barry Parsons (Oxford) (now faculty member at Sun-Yat-Sen University, Guangzhou, China)

2011-2015 Grace Campbell, Cambridge, “Active Tectonics of the Tien Shan in Kazakhstan and Kyrgyzstan” Joint-lead supervisor with Prof. James Jackson (Cambridge) (now working as a Geotechnical engineer at ARUP)

2010-2014 Zahra Mousavi, Grenoble, “Characterisation of active fault behaviour in eastern Iran using a combined geodetic (GPS and InSAR) and tectonic approach: implications for seismic hazard”, Co-supervisor with Drs. Andrea Walpersdorf and Erwan Pathier (Grenoble) (now faculty member at the University of Zanjan)

2008-2012 Laura Gregory, *Oxford*, “Active Faulting and Deformation of the Mongolian Altay Mountains” Joint-lead supervisor with Prof. Conall Mac NioCaill (Oxford) (now a NERC Post-Doctoral Fellow at the University of Leeds)

2004-2008 Edwin Nissen, *Oxford*, “Active tectonics and earthquakes in the Alpine-Himalaya belt” *Secondary supervisor* (now a faculty member at the University of Victoria, Vancouver Island)

2003-2006 James Hollingsworth, *Cambridge, “Active Tectonics of NE Iran” Informal supervisor* (Now CNRS Research Fellow, Grenoble)

2001-2004 Lucy Ramsey, *Cambridge, “Active continental collision in Taiwan and southern Iran” Informal supervisor* (now working as a geoscientist in the oil and gas industry)

Publications (* denotes student first author)

I have published over 80 articles in a range of respected academic journals. My work has over 4000 citations and I have an h-index of 33 (statistics from google scholar).

In revision

Feng, X., Ma, J., Zhou, Y., England, P., Parsons, B., Rizza, M.A., Walker, R.T., 2019. Geomorphology and Palaeoseismology of the Weinan fault, Shaanxi, central China: insights into the source of the 1556 Huaxian earthquake. Journal of Geophysical Research, in review

*Campbell, G.E., Walker, R.T., Abdrakhmatov, K., Carolin, S., Carr, A.S., Elliott, J.R., Jackson, J., Mackenzie, D., Rizza, M., Rodes, A., 2019. Rapid late Quaternary slip on the Karakhudzhur thrust, central Kyrgyz Tien Shan, Tectonics

Elliott, A.J., Elliott, J.R., Hollingsworth, J., Kulikova, G., Parsons, B., Walker, R.T., 2019. The 2015 M7.2 Rupture of the Sarez-Karakul Fault, Tajikistan, and its role in a sequence of shallow strike-slip earthquakes in the central Pamir. Geophysical Journal International.

Carolin, S.A., Ersek, V., Roberts, W., Walker, R.T., Henderson, G.M., 2019. Drying in the Middle East during Northern Hemisphere cold events of the early glacial period. Geophysical Research Letters.

2019

*McNab, F., Sloan, R.A., Walker, R.T., 2019. Simultaneous orthogonal shortening in the Afghan-Tajik depression. Geology.

Rizza. M., Abdrakhmatov, K., Walker R., Braucher R., Campbell G., McKenzie D., Guillou V., Carr, A., Jackson J., Ali-Hadji H. and ASTER Team, 2019. Rate of slip from multiple quaternary dating methods and paleoseismic investigations along the Talas-Fergana Fault: tectonic implications for the Western Tien Shan Range. Tectonics

Grützner, C., Campbell, G., Walker, R.T., Jackson, J., Mackenzie, D., Abdrakhmatov, K., 2019. Shortening accommodated by thrust and strike-slip faults in the Ili Basin, northern Tien Shan, Tectonics

Grützner, C., Walker, R., Ainscoe, E., Elliott, A., Abdrakhmatov, K., 2019. Earthquake environmental effects of the 1992 Ms7.3 Suusamyr earthquake, Kyrgyzstan, and their implications for palaeo-earthquake studies. Geosciences, 9, 271.

Day, C.C., Carolin, S.A., Walker, R.T., Ersek, V., Sloan, R.A., Dee, M.W., Talebian, M. and Henderson, G.M., 2019. Reply to Jaffe et al.: Paleoscience precision in an archeological or historical context. Proceedings of the National Academy of Sciences of the United States of America.

Mosca, I., Baptie, B., Sargeant, S. and Walker, R.T., 2019. Integrating Outcomes from Probabilistic and Deterministic Seismic Hazard Analysis in the Tien Shan. Bulletin of the Seismological Society of America, 109(2), pp.688-715.

Carolin, S.A., Walker, R.T., Day, C.C., Ersek, V., Sloan, R.A., Dee, M.W., Talebian, M. and Henderson, G.M., 2019. Precise timing of abrupt increase in dust activity in the Middle East coincident with 4.2 ka social change. Proceedings of the National Academy of Sciences, 116(1), pp.67-72.

2018

*Ainscoe, E.A., Abdrakhmatov, K.E., Baikulov, S., Carr, A.S., Elliott, A.J., Grützner, C. and Walker, R.T., 2018. Variability in surface rupture between successive earthquakes on the Suusamyr Fault, Kyrgyz Tien Shan: implications for palaeoseismology. Geophysical Journal International, 216(1), pp.703-725.

*Zhou, Y., Parsons, B. and Walker, R.T., 2018. Characterising complex surface ruptures in the 2013 Mw 7.7 Balochistan earthquake using three-dimensional displacements. Journal of Geophysical Research, 123(11).

*Mackenzie, D., Walker, R., Abdrakhmatov, K., Campbell, G., Carr, A., Gruetzner, C., Mukambayev, A. and Rizza, M., 2018. A creeping intracontinental thrust fault: past and present slip-rates on the Northern edge of the Tien Shan, Kazakhstan. Geophysical Journal International, 215(2), pp.1148-1170.

Gregory, L.C., Mac Niocaill, C., Walker, R.T., Bayasgalan, G. and Craig, T.J., 2018. Vertical axis rotation (or lack thereof) of the eastern Mongolian Altay Mountains: Implications for far-field transpressional mountain building. Tectonophysics, 736, pp.31-46.

*Zhou, Y., Thomas, M.Y., Parsons, B. and Walker, R.T., 2018. Time-dependent postseismic slip following the 1978 M w 7.3 Tabas-e-Golshan, Iran earthquake revealed by over 20 years of ESA InSAR observations. Earth and Planetary Science Letters, 483, pp.64-75.

2017

*Ainscoe, E.A., Elliott, J.R., Copley, A., Craig, T.J., Li, T., Parsons, B.E. and Walker, R.T., 2017. Blind Thrusting, Surface Folding, and the Development of Geological Structure in the Mw 6.3 2015 Pishan (China) Earthquake. Journal of Geophysical Research: Solid Earth, 122(11), pp.9359-9382.

*Middleton, T.A., Parsons, B. and Walker, R.T., 2017. Comparison of seismic and geodetic strain rates at the margins of the Ordos Plateau, northern China. Geophysical Journal International, 212(2), pp.988-1009.

Grützner, C., Walker, R.T., Abdrakhmatov, K.E., Mukambaev, A., Elliott, A.J. and Elliott, J.R., 2017. Active tectonics around Almaty and along the Zailisky Alatau rangefront. Tectonics, 36(10), pp.2192-2226.

Walker, R.T., Wegmann, K.W., Bayasgalan, A., Carson, R.J., Elliott, J., Fox, M., Nissen, E., Sloan, R.A., Williams, J.M. and Wright, E., 2015. The Egiin Davaa prehistoric rupture, central Mongolia: a large magnitude normal faulting earthquake on a reactivated fault with little cumulative slip located in a slowly deforming intraplate setting. Geological Society, London, Special Publications, 432, SP432-4.

*Middleton, T.A., Elliott, J.R., Rhodes, E.J., Sherlock, S., Walker, R.T., Wang, W., Yu, J. and Zhou, Y., 2017. Extension rates across the northern Shanxi Grabens, China, from Quaternary geology, seismicity and geodesy. Geophysical Journal International, 209(2), pp.535-558.

2016

*Middleton, T.A., Walker, R.T., Rood, D.H., Rhodes, E.J., Parsons, B., Lei, Q., Zhou, Y. and Ren, Z., 2016.The tectonics of the western Ordos Plateau, Ningxia, China: slip rates on the Luoshan and East Helanshan Faults. Tectonics, 35, 2754-2777

Gruetzner, C., Carson, E., Walker, R. T., Rhodes, E.J., Mukambayev, A., Mackenzie, D., Elliott, J.R., Campbell, G., Abdrakhmatov, K., 2016. Assessing the activity of faults in continental interiors: palaeoseismic insights from SE Kazakhstan. Earth and Planetary Science Letters. doi:10.1016/j.epsl.2016.11.025.

Walker, R.T., Telfer, M., Kahle, R.L., Dee, M.W., Kahle, B., Schwenninger, J.-L., Sloan, R.A., Watts, A.B., 2016. Rapid mantle-driven uplift along the Angolan margin in the late Quaternary. Nature Geosciences, 9, 909-914.

Talebian, M., Copley, A. C., Fattahi, M., Ghoraishi, M., Jackson, J. A., Nazari, H., Sloan, R. A., Walker R. T., 2016. Active faulting within a megacity: the geometry and slip rate of the Pardisan thrust in central Tehran, Iran. Geophysical Journal International, 207, 1688-1699.

*Zhou, Y., Walker, R.T., Hollingsworth, J., Talebian, M., Song, X., Parsons B. (2016). Coseismic and postseismic displacements from the 1978 M w 7.3 Tabas-e-Golshan earthquake in eastern Iran. Earth and Planetary Science Letters 452, 185-196

*Zhou, Y., Walker, R.T., Elliott, J.R., Parsons B., (2016). Mapping 3D fault geometry in earthquakes using high-resolution topography: Examples from the 2010 El Mayor-Cucapah (Mexico) and 2013 Balochistan (Pakistan) earthquakes. Geophysical Research Letters 43 (7), 3134-3142

*Mackenzie, D Elliott, JR Altunel, E Walker, RT Kurban, YC (2016). Seismotectonics and rupture process of the MW 7.1 2011 Van reverse-faulting earthquake, eastern Turkey, and implications for hazard in regions of distributed shortening. Geophysical Journal International 206 (1), 501-524

Abdrakhmatov, K.E., Walker, R.T., Campbell, G.E., Carr, A.S., Elliott, A., Hillemann, C., Hollingsworth, J., Landgraf, A., Mackenzie, D., Mukambayev, A. and Rizza, M., 2016. Multi-segment rupture in the July 11th 1889 Chilik earthquake (Mw 8.0-8.3), Kazakh Tien Shan, interpreted from remote-sensing, field survey, and palaeoseismic trenching. Journal of Geophysical Research: Solid Earth.

*Middleton, T.A., Walker, R.T., Parsons, B., Lei, Q., Zhou, Y. and Ren, Z., 2016. A major, intraplate, normal-faulting earthquake: The 1739 Yinchuan event in northern China. Journal of Geophysical Research: Solid Earth.

England, P.C., Walker R.T., (2016). Comment on:"Crustal strength in central Tibet determined from Holocene shoreline deflection around Siling Co" by Xuhua Shi, Eric Kirby, Kevin P. Furlong, Kai Meng, Ruth Robinson and Erchie Wang. Earth and Planetary Science Letters 433, 393-395

2015

Zhou, Y., Parsons, B., Elliott, J.R., Barisin, I. and Walker, R.T., 2015. Assessing the ability of Pleiades stereo imagery to determine height changes in earthquakes: A case study for the El Mayor-Cucapah epicentral area. Journal of Geophysical Research: Solid Earth, 120(12), pp.8793-8808.

Zhou, Y., Elliott, J.R., Parsons, B. and Walker, R.T., 2015. The 2013 Balochistan earthquake: An extraordinary or completely ordinary event?. Geophysical Research Letters, 42(15), pp.6236-6243.

Mousavi, Z., Pathier, E., Walker, R.T., Walpersdorf, A., Tavakoli, F., Nankali, H., Sedighi, M. and Doin, M.P., 2015. Interseismic deformation of the Shahroud fault system (NE Iran) from space-borne radar interferometry measurements. Geophysical Research Letters, 42(14), pp.5753-5761.

Campbell, G.E., Walker, R.T., Abdrakhmatov, K., Jackson, J., Elliott, J.R., Mackenzie, D., Middleton, T. and Schwenninger, J.L., 2015. Great earthquakes in low strain rate continental interiors: An example from SE Kazakhstan. Journal of Geophysical Research: Solid Earth, 120(8), pp.5507-5534.

Walker, R.T., Wegmann, K.W., Bayasgalan, A., Carson, R.J., Elliott, J., Fox, M., Nissen, E., Sloan, R.A., Williams, J.M. and Wright, E., 2015. The Egiin Davaa prehistoric rupture, central Mongolia: a large magnitude normal faulting earthquake on a reactivated fault with little cumulative slip located in a slowly deforming intraplate setting. Geological Society, London, Special Publications, 432, pp.SP432-4.

R.T. Walker, M.M. Khatib, A. Bahroudi, C. Schnabel, A. Rodes, M. Fattahi, M. Talebian, E. Bergman 2015. Co-seismic, geomorphic, and geologic fold growth associated with the 1978 Tabas earthquake fault in eastern Iran. Geomorphology.

2014

L.C. Gregory, A.L. Thomas, R.T. Walker, R. Garland, C. MacNiocaill, C. Fenton, C. Schnabel, A. Bayasgalan, T. Amgaa, B. Gantulga (2014). Combined uranium series and 10Be cosmogenic exposure dating of surface abandonment: a case study from the Olgiy strike-slip fault in western Mongolia. Quaternary Geochronology, 24, 27-34

H. Nazari, J-F. Ritz, R.T. Walker, R. Salamati, M. Rizza., R. Patnaik, J. Hollingsworth, H. Alimohammadian, A. Jalili, A. Kaveh Firouz A. Shahidi (2014) Palaeoseismic evidence for a medieval earthquake, and preliminary estimate of late Pleistocene slip-rate, on the Firouzkuh strike-slip fault in the central Alborz region of Iran. Journal of Asian Earth Sciences, 82, 124-135.

M. Fattahi, R.T. Walker, M. Talebian, R.A. Sloan, A Rasheedi, (2014). Late Quaternary active faulting and landscape development in the South Golbaf Basin, Gowk Fault, E. Iran. Geomorphology, 204, 334-343.

2013

G.E. Campbell, R.T. Walker, K. Abdrakhmatov, J.L. Schwenninger, J. Jackson, J.R. Elliott, A. Copley, (2013). The Dzhungarian fault: Late Quaternary tectonics and slip rate of a major right-lateral strike-slip fault in the northern Tien Shan region. Journal of Geophysical Research, 118, 5681-5698

P.C., England, R.T. Walker, B.H., Fu. M.A., Floyd, (2013). A bound on the viscosity of the Tibetan crust from the horizontality of palaeolake shorelines. Earth and Planetary Science Letters, 375, 44-56.

Z. Mousavi, A. Walpersdorf, R.T. Walker, F. Tavakoli, E. Pathier, H. Nankali, F. Nilforoushan, A. Jadidi, A. Aghamohammadi, Y. Djamour (2013). Global Positioning System constraints on the active tectonics of NE Iran and the South Caspian. Earth and Planetary Science Letters, 377, 287-298.

A.J. West, M. Fox, R.T. Walker, A. Carter, T. Harris, A. Watts, B. Gantulga (2013). Links between climate, erosion, uplift, and topography during intra-continental mountain building of the Hangay Dome, Mongolia. G3, 14, 5171-5193.

R.T. Walker and others (2013). The 2010-2011 South Rigan (Baluchestan) earthquake sequence and its implications for distributed deformation and earthquake hazard in southeast Iran. Geophysical Journal International, 193, 349-374.

2011

R.T. Walker, E.A. Bergman, W. Szeliga, E.J. Fielding (2011). Insights into the 1968-1997 Dasht-e-Bayaz and Zirkuh earthquake sequences, eastern Iran, from calibrated relocations, InSAR, and high-resolution satellite imagery. Geophysical Journal International, 187, 1577-1603.

M. Fattahi, R.T. Walker, M. Talebian, R.A. Sloan, A. Rasheedi (2011). The structure and Late Quaternary slip-rate of the Rafsanjan strike-slip fault, SE Iran. Geosphere, 7, 1159-1174.

R.T. Walker, M. Fattahi (2011). A framework of Holocene and Late Pleistocene environmental change in eastern Iran inferred from the dating of periods of alluvial fan abandonment, river terracing, and lake deposition. Quaternary Science Reviews, 30, 1256-1271

J. Elliott, B.E. Parsons, J. Jackson, X. Shan, R. Sloan, R. Walker. (2011) Depth Segmentation of the Seismogenic Continental Crust: the 2008 and 2009 Qaidam Earthquakes. Geophysical Research Letters, 38, L06305, 10.1029/2011GL046897

R.T. Walker, L.A. Ramsey, J. Jackson (2011). Geomorphic evidence for ancestral drainage patterns in the Zagros Simple Folded Zone and growth of the Iranian plateau. Geological Magazine, 148, 901-910.

B. Fu, R. Walker, M. Sandiford (2011). Editorial: The 2008 Wenchuan earthquake and active tectonics of Asia. Journal of Asian Earth Sciences, 40, 797-804.

2010

J. Hollingsworth, H. Nazari, J-F. Ritz, R. Salamati, M. Talebian, A. Bahroudi, R. Walker, M. Rizza, J. Jackson (2010). Active tectonics of the East Alborz mountains, NE Iran: rupture of the left-lateral Astaneh fault system during the great 856AD Qumis earthquake. Journal of Geophysical Research, 115, B12313, doi:10.1029/2009JB007185.

K.L. Frankel, K.W. Wegmann, A. Bayasgalan, R.J. Carson, N.E. Bader, T. Adiya, E. Bolor, C.C. Durfey, J. Otgonkhuu, J. Sprajcar, K.E. Sweeney, R.T. Walker, T.L. Colbert, L. Gregory (2010). Late Pleistocene slip rate of the Hoh Serh-Tsagaan Salaa fault system, Mongolian Altai and intracontinental deformation in central Asia. Geophysical Journal International, 183, 1134-1150.

R.T. Walker, M. Talebian, S. Saiffori, R.A. Sloan, A. Rasheedi, N. MacBean, A. Ghassemi (2010). Active faulting, earthquakes, and restraining bend development near Kerman city in southeastern Iran. Journal of Structural Geology, 32, 1046-1060.

M. Berberian, R.T. Walker (2010). The Rudbar Mw 7.3 earthquake of June 20 1990: Seismotectonics, coseismic and geomorphic displacements, and historic earthquakes of the western 'High-Alborz', Iran. Geophysical Journal International, 10.1111/j.1365-246X.2010.04705.x.

R.T. Walker, S. Claisse, M. Telfer, E. Nissen, P. England, C. Bryant, R. Bailey (2010). Preliminary estimate of Holocene slip-rate on active normal faults bounding the southern coast of the Gulf of Evia, central Greece. Geosphere, 6, 583-593.

J. Hollingsworth, M. Fattahi, R.T. Walker, M. Talebian, A. Bahroudi, M.J. Bolourchi, J. Jackson, A. Copley (2010). Oroclinal bending, distributed thrust and strike-slip faulting, and the accommodation of Arabia-Eurasia convergence in NE Iran since the Oligocene. Geophysical Journal International, doi: 10.1111/j.1365-246X.2010.04591.x

R.T. Walker, M. Talebian, R.A. Sloan, A. Rasheedi, M. Fattahi, C. Bryant (2010). Holocene slip-rate on the Gowk strike-slip fault and implications for the distribution of tectonic strain in eastern Iran. Geophysical Journal International, doi: 10.1111/j.1365-246X.2010.04538.x

2009

E. Nissen, R. Walker, A. Bayasgalan, A. Carter, M. Fattahi, E. Molor, C. Schnabel, A.J. West, S. Xu (2009). The late Quaternary slip-rate of the Har-Us-Nuur fault (Mongolian Altai) from cosmogenic ^{10}Be and luminescence dating. Earth and Planetary Science Letters, 286, 467-478.

R.T. Walker, P. Gans, M.B. Allen, J. Jackson, M. Khatib, N. Marsh, M. Zarrinkoub (2009). Late Cenozoic volcanism and rates of active faulting in eastern Iran. Geophysical Journal International, 177, 783-805.

E. Nissen, R. Walker, E. Molor, M. Fattahi, A. Bayasgalan (2009). Late Quaternary rates of uplift and shortening at Baatar Hyarhan (Mongolian Altai) with Optically Stimulated Luminescence. Geophysical Journal International, 177, 259-278.

J. Hollingsworth, J. Jackson, R. Walker, H. Nazari (2009). Extrusion tectonics and subduction in the eastern South Caspian region since 10 Ma: Reply to comment. Geology, doi: 10.1130/G30529Y.1., e199-e200.

2008

J. Hollingsworth, J. Jackson, R. Walker, H. Nazari (2008). Extrusion tectonics and subduction in the eastern South Caspian region since 10 Ma. Geology, 36, 763-766. doi: 10.1130/G25008A.1.

R.T. Walker, E. Molor, M. Fox, A. Bayasgalan (2008). Active tectonics of an apparently aseismic region: distributed active strike-slip faulting in the Hangay Mountains of central Mongolia. Geophysical Journal International, 174, 1121-1137. doi: 10.1111/j.1365-246X.2008.03874.x.

L.A. Ramsey, R.T. Walker, J.A. Jackson (2008). Fold evolution and drainage development in the Zagros mountains of Fars province, SE Iran. Basin Research, 20, 23-48.

2007

L.A. Ramsey, R.T. Walker, J.A. Jackson (2007). Geomorphic constraints on the active tectonics of southern Taiwan. Geophysical Journal International, 170, 1357-1372.

R.T. Walker, E. Nissen, E. Molor, A. Bayasgalan (2007). A re-interpretation of the active faulting in central Mongolia. Geology, 35, 759-762.

M. Fattahi, R. Walker (2007). Luminescence dating of the last earthquake of the Sabzevar thrust fault, NE Iran. Quaternary Geochronology, 2, 284-289.

M. Fattahi, R. Walker, M.M. Khatib, A. Dolati, A. Bahroudi. (2007). Past earthquakes and slip-rate estimate on the Doruneh fault, NE Iran. Geophysical Journal International, 168, 691-709.

2006

E. Pathier, E.J. Fielding, T.J. Wright, R. Walker, B.E. Parsons, S. Hensley (2006). Displacement field and slip distribution of the 2005 Kashmir earthquake from SAR imagery. Geophysical Research Letters, 33, L20310, 10.1029/2006GL027193.

R.T.Walker and M.M. Khatib (2006). Active faulting in the Birjand region of eastern Iran. Tectonics, 25, 10.1029/2005TC001871.

R.T.Walker, A. Bayasgalan, R. Carson, R. Hazlett, L. McCarthy, J. Mischler, E. Molor, P. Sarantsetseg, L. Smith, B. Tsogtbadrakh, G. Tsolmon (2006). Geomorphology and Structure of the Jid right-lateral strike-slip fault in the Mongolian Altay Mountains. Journal of Structural Geology, 28, 1607-1622.

M. Fattahi, R. Walker, J. Hollingsworth, A. Bahroudi, M. Talebian, S. Stokes (2006). Holocene slip-rate on the Sabzevar thrust fault, NE Iran, determined using Optically-stimulated Luminescence (OSL). Earth and Planetary Science Letters, 245, 673-684.

J. Hollingsworth, J. Jackson, R. Walker, M.R. Gheitanchi, M.J. Bolourchi (2006). Strike-slip faulting, rotation, and along-strike elongation in the Kopeh Dagh mountains, NE Iran. Geophysical Journal International, 166, 1161-1177.

J. Jackson, M. Bouchon, E. Fielding, G. Funning, M. Ghorashi, D. Hatzfeld, H. Nazari, B. Parsons, K. Priestley, M. Talebian, M. Tatar, R. Walker, T. Wright (2006). Seismotectonic, rupture-process, and earthquake-hazard aspects of the 26 December 2003 Bam, Iran, earthquake. Geophysical Journal International, 163, 90-105.

M.B. Allen, R. Walker, J. Jackson, E.J-P, Blanc, M. Talebian, M.R. Ghassemi (2006). Contrasting styles of convergence in the Arabia-Eurasia collision: Why escape tectonics does not occur in Iran. Geological Society of America Special Paper, 409, 579-589.

B. Parsons, T. Wright, P. Rowe, J. Andrews, J. Jackson, R. Walker, M. Khatib, M. Talebian, E. Bergman, E.R. Engdahl (2006). The 1994 Sefidabeh (eastern Iran) earthquakes revisited: new evidence from satellite radar interferometry and carbonate dating about the growth of an active fold above a blind thrust fault. Geophysical Journal International, 164, 202-217.

R.T.Walker (2006). A remote sensing study of active folding and faulting in southern Kerman province, S.E. Iran. Journal of Structural Geology, 28, 654-668.

2005

R.T. Walker, M.J. Andalibi, M.R. Gheitanchi, J.A. Jackson, S. Karegar, K. Priestley (2005). Seismological and field observations from the 6 November 1990 Furg (Hormozgan) earthquake: a rare case of surface rupture in the Zagros mountains of Iran. Geophysical Journal International, 163, 567-579.

R.T. Walker, E. Bergman, J. Jackson, M. Ghorashi and M. Talebian (2005). The 22 June 2002 Changureh (Avaj) earthquake in Qazvin province, NW Iran: Epicentral re-location, source parameters, surface deformation and geomorphology. Geophysical Journal International, 160, 707-720.

E.J. Fielding, M. Talebian, P.A. Rosen, H. Nazari, J.A. Jackson, M. Ghorashi, R. Walker (2005). Surface ruptures and building damage of the 2003 Bam, Iran, earthquake mapped by satellite synthetic aperture radar interferometric correlation. Journal of Geophysical Research, 110, 10.1029/2004JB003299

2004

M. Talebian, E.J. Fielding, G.J. Funning, M. Ghorashi, J. Jackson, H. Nazari, B. Parsons, K. Priestley, P.A. Rosen, R. Walker, T.J. Wright (2004). The 2003 Bam (Iran) earthquake: rupture of a blind strike-slip fault. Geophysical Research Letters, 31, L11611, 10.1029/2004GL020058

R. Walker and J. Jackson (2004). Active tectonics and late Cenozoic strain distribution in central and eastern Iran, Tectonics, 23, 10.1029/2003TC001529.

M.B. Allen, J.A. Jackson, R. Walker (2004). Pliocene-Quaternary re-organization of the Arabia-Eurasia collision: matching short-term and long-term deformation rates: Reply to Comment, Tectonics, 23, TC5007, 10.1029/2004TC001695

M.B. Allen, J.A. Jackson, R. Walker (2004). Pliocene-Quaternary re-organization of the Arabia-Eurasia collision: matching short-term and long-term deformation rates, Tectonics, 23, TC2008, 10.1029/2003TC001530

E.J. Fielding, T.J. Wright, J. Muller, B.E., Parsons, R. Walker (2004). Aseismic deformation of a fold-and-thrust belt imaged by synthetic aperture radar interferometry near Shahdad, southeast Iran. Geology, 32(7), 577-580.

R. Walker, J. Jackson and C. Baker (2004). Active faulting and seismicity of the Dasht-e-Bayaz region, eastern Iran, Geophysical Journal International, 157, 265-282.

2003

R. Walker, J. Jackson and C. Baker (2003). Thrust faulting in eastern Iran: source parameters and surface deformation of the 1978 Tabas and 1968 Ferdows earthquake sequences, Geophysical Journal International, 152, 749-765.

2002

R. Walker and J. Jackson (2002). Offset and evolution of the Gowk fault, S.E. Iran: a major intra-continental strike-slip system, Journal of Structural Geology, 24, 1677-1698.

2001

M. Berberian, C. Baker, E. Fielding, J.A. Jackson, B.E. Parsons, K. Priestley, M. Qorashi, M. Talebian, R. Walker, T.J. Wright (2001). The March 14 1998 Fandoqa earthquake (Mw6.6) in Kerman province, SE Iran: Re-rupture of the 1981 Sirch earthquake fault, triggering of slip on adjacent thrusts, and the active tectonics of the Gowk fault zone, Geophysical Journal International, 146, 371-398.