Anthony Brian Watts

Academic qualifications:

2003	University of Oxford *D.Sc.*
1970	University of Durham *Ph.D. Marine Geophysics*.
1967	University College, London *B.Sc. (Special) Geology and Physics*.

Positions held:

2018-	*Emeritus Professor*, Department of Earth Sciences, University of Oxford.
2018-2023	*Adjunct Senior Researcher*, Lamont-Doherty Earth Observatory of Columbia University, USA.
2018-2020	*Emeritus Fellow*, The Leverhulme Trust.
1990-	*Professor of Marine Geology and Geophysics:* University of Oxford.
1989-1990	*Arthur D. Storke Memorial Professor of Geological Sciences:* Columbia University, USA.
1981-1988	*Professor of Geological Sciences:* Columbia University, USA.
1976-1981	*Senior Research Associate in Gravity and Tectonics*: Lamont-Doherty Geological Observatory of Columbia University, USA.
1971-1976	*Research Associate:* Lamont-Doherty Geological Observatory of Columbia University, USA.
1970-1971	*National Research Council of Canada Post-Doctoral Fellow in Marine Geophysics:* Bedford Institute of Oceanography, Canada.

Honours and awards:

2020	Maurice Ewing Medal of the American Geophysical Union.
2014	Fellow, The Royal Society.
2008	Arthur Holmes Medal of the European Geosciences Union.
2006	Honorary Membership, European Geosciences Union.
2007	Fellow, Geological Society of America.
2004	George P. Woollard Award of the Geological Society of America.
1999	Member, *Academia Europaea*.
1993	Murchison Medal of the Geological Society of London.
1985	Fellow, American Geophysical Union.
1982	Rosenstiel Award of the Rosenstiel School of Marine and Atmospheric Science, University of Miami.
1981	A. I. Levorsen Award of the American Association of Petroleum Geologists.
1964	Chubb Prize in Geology, University College, London.

Distinguished lectures:

2025-2026	Distinguished Lecturer of the American Geophysical Union
2015	Sir Harold Jeffreys Lecturer of the Royal Astronomical Society.

1992	William Smith Lecturer of the Geological Society of London.
1988	Bullerwell Lecturer of the British Geophysical Association.

Visiting positions:

2011	*Visiting Professor:* Victoria University, Wellington, New Zealand
2010, 2015	*Visiting Professor:* University of Colorado, Boulder, USA
2004-2005	*Green Scholar:* Scripps Institution of Oceanography, University of California, La Jolla, California, USA
2004,2006,2010	*Visiting Professor:* University Pierre et Marie Curie, Paris, France
1998	*Distinguished Crosby Visiting Professor:* Massachusetts Institute of Technology, Boston, USA
1987-1988	*Royal Society Guest Fellow:* University of Oxford
1983	*Visiting Professor:* Institut Physique du Globe de Paris, Paris, France

Oceanographic cruises (26):

- R/V *Marcus G. Langseth*, 2018, 2019. C., NW. Pacific.
- R/V *SONNE,* 2008, 2011. SW. Pacific, Tonga-Kemadec Trench.
- RRS *Discovery,* 2003. Equatorial Atlantic, Amazon Fan and Demerara Plateau.
- RRS *Charles Darwin*, 1991/92, 1993, 1997. E. Atlantic, Mediterranean Sea.
- D/V *Glomar Challenger,* 1983. W. Atlantic.
- R/V *Jean Charcot,* 1988. Mediterranean Sea, Alboran Sea, Valencia Gulf.
- R/V *Robert D. Conrad*, 1974, 1982, 1984, 1988, Phillipine Sea, W., C. Pacific, W. Atlantic, Mediterranean Sea.
- R/V *Vema*, 1973 (2), 1975, 1977, 1979, NE. Atlantic, North Sea, E., C. and W. Pacific, Coral Sea, Tasman Sea.
- CSS *Hudson*, 1971, Gulf of Maine, W. Atlantic.
- RRS *Moray Firth*, 1969, NE. Atlantic.
- R/V *Arran Firth,* 1969, Iceland-Faeroes Rise, NE. Atlantic.
- RRS *John Murray*, 1967 (2), 1968 (2), Celtic Sea, Irish Sea, NE. Atlantic.

Current research:

- The Earth's gravity field and its relationship to isostasy.
- Lithospheric flexure and its role in the evolution of rifted margins, deep-sea trench and outer-rise systems, mid-oceanic ridges, fracture zones and oceanic islands and seamounts.
- Tectonic uplift and subsidence history, global sea-level change and the evolution of sedimentary basins.
- The long-term strength of the lithosphere and its relationship to the elastic, thermal and seismogenic layer thickness.

Advisor:

- **Post-doctoral fellows (18):**
  Steve Daly, Neil Ribe, Dork Sahagian, Montserrat Torné, Jenny Collier, Neil Mitchell, Tim Henstock, Gareth Armstrong, David Haddad, Marta Pérez-Gussinyé, Øyvind Engen, Lara Kalnins, Michele Paulatto, James Moore, Phil Cilli, An Yang, Chong Xu, Zhenyu Wang.
- **Ph.D students (39):**
  John Bodine, Mike Steckler, Garry Karner, Julian Thorne, Uri ten Brink, Robin Bell, Pål Wessel, Walter Smith, Bernie Coakley, Andrew Goodwillie, Peter Burgess, Roxby Hartley, Catherine Marr, Rupert Dalwood, Nathan Hayward, Audrey Willet, Jonathan Stewart, David Haddad, Martin Gee, Suman Chowdhury, Emily Black, Andrew Lin, Mohammed Ali, Paul Wyer, David Close, John Hillier, Natalie Lane, Tom Jordan, Tiago Cunha, Matt Rodger, Lara Kalnins, Daniel Bassett, Johnny Hunter, Elisabeth Muller, Brook Tozer, Dirk Metz, Rebecca Morgan, Brook Keats, Denise Swanborn.
- **MESc. students (27):**
  James Carver, Kirsty Tinto, Tom Jordan, Katrina Beadle, Kimberley Richards, James Humphreys, Michael Floyd, Cian Wilson, Rebecca Bell, Ross Parnell-Turner, Jonathan Pim, Charlotte Moss, Melanie Savage, Deborah Lee, Daniel Frost, Holly Rouse-Sweeney, Elisabeth Muller, Adam Robinson, James Bowles, Thomas Phillips, Fred Richards, Rebecca Morgan, Lucy Andrew, Sian Evans, Guy Paxman, Scott Davis, Max Davis,

Teaching (highlights):

Undergraduate:

- **First Year**: Plate tectonics. Gravity and isostasy. The geological history of the British Isles. The last million years. *Field trips to Assynt, Arran and Pembroke.*
- **Second Year**: Geophysical Methods in Geology (gravity, magnetic, seismic reflection and refraction). *Field trip to the Mendip Hills*. Geological maps. Thermal and mechanical properties of the lithosphere. Geology of the Ocean Floor. *Field trips to Dorset, Assynt and Cornwall*.
- **Third Year**: Sedimentary basin formation. *Field trip to Greece*.
- **Fourth Year**: Anatomy of a mountain belt (comparative studies of the Andes, Alps, and Himalaya).

Graduate:

Gravity and Geodesy. Geophysical Theory. Seminar in Marine Geology and Geophysics. Sedimentary Basin Formation.

Editorial board:

2005-2011: Elsevier "Treatise in Geophysics" – Volume 6: Crust and Lithosphere Dynamics (Editor). 2000-present: Kluwer "Coastal Systems and Continental Margins". 2010-present: Proceedings of the Geologist Association. 1987-1995: Basin Research. 1984-1988: Tectonophysics. 1984-1995: Marine Geophysical Researches. 1983-1995: Marine and Petroleum Geology. 1983-1986: Geology. 1976-1982: Journal of Geophysical Research.

External activities (highlights):

- Member, American Geophysical Union (AGU) College of Fellows New Frontiers Committee (2025-2027)
- Member, Geological Society of London Awards Committee (2019-2021)
- Member, NERC S&F/LRI Added Value Assessment Panel (2020-2021)
- Member, American Geophysical Union (AGU) Mentoring Committee (2019-2021)
- Council of the AGU and President, Tectonophysics Section (2015-2016)
- AGU Paul G. Silver Award Committee (Chair)
- AGU Search Committees for Editor-in-Chief of Tectonics (member) and J. Geophysical Res. (Chair)
- Member, NSF GeoPRISMS Oversight and Steering Committee (2013-2016)
- Member, AGU Scientific Trends Task Force
- Member, The Royal Society Newton Advanced Fellowship Awards Committee
- Member, The Royal Society Section 5 Fellowship Nominations Committee (2016-2019)
- UK IODP Assessment Panel (2015)
- Council of the AGU and President-elect, Tectonophysics Section (2012-2014)
- AGU, Tectonophysics Section Fellows Nomination Committee (Chair) (2012-2014)
- Review Panel of the 2012 German Excellence Initiative
- 2010 Decadal Review of the NSF US MARGINS program (Chair)
- Council and Chair of the Science Committee of the Geological Society of London (2004-2008)
- 2007 Scientific Advisory Board of the Leibniz Institute for Marine Sciences (IFM-GEOMAR)
- External examiner: Universities of Southampton, Durham and Leicester.
- National Science Foundation (NSF) Panel in Marine Geology and Geophysics.
- European Science Foundation (ESF) EUROMARGINS Science Steering Committee
- UK representative on “InterMARGINS” steering committee
- Programme Management Board for the NERC/LINK Programme "Ocean Margins".
- European Community Deep Earth Geology Program (JOULE), Project IAM (Iberia
- Atlantic Margins) Science Steering Committee
- National Environment Research Council (NERC) Geological Sciences Committee.
- NERC Science Management Audit of Research Vessels Services (RVS)
- NERC Sea-time assessment panel.
- British Mid-Oceanic Ridge (BRIDGE) steering committee (co-opted member).
- Science Advisory Committee of Project Hedera (University of Aberdeen).
- British Institutions Reflection Profiling Syndicate (BIRPS) Programme Board (Chair).
- NERC Review committee of the BIRPS program.
- JOIDES Sea-level Working Group (1990-91)
- Science Steering Committee for a Deep Drill-Hole on Hawaii.
- Conference on Scientific Ocean Drilling (COSOD) – Working Group on Tectonic evolution of continental margins and oceanic crust (Chair) (1981).
- Geopotential Research Mission (GRM) Science Steering Group (1983-84)

- NASA working group on a Dedicated Satellite Gravity Mission (GRAVSAT) – Solid-Earth Applications (Chair) (1978-1980)
- Tectonics Panel of the Deep-Sea Drilling Project (DSDP)
- US National Academy Sciences Committee on Earth Sciences (1979-1981)
- US National Academy Sciences. Committee on Geodesy. Panel on Gravity and Sea-level (1978-1980)

Internal activities (highlights):

- Chair of the Sub-Faculty of the Department of Earth Sciences of Oxford University.
- Chair of the Department of Geological Sciences of Columbia University (1983-1986).
- Associate Director of the Lamont-Doherty Geological Observatory (1983-1986).
- Executive Committee of the Lamont-Doherty Geological Observatory (1983-1986).

Funding sources:

US Office of Naval Research, National Science Foundation (OCE), US Department of Defence (DOD), NASA, Joint Oceanographic Institutions (JOI), NERC (Geological Sciences Committee), NERC (ROPA), NERC/LINK Programme in Ocean Margins, NERC standard grants, International Ocean Drilling Program (IODP), British Council (Madrid, Beijing), The Royal Society, European Science Foundation, European Union (Marie-Curie Fellowship Programme), The Petroleum Institute (Abu Dhabi), Hydrocarbons industry (Exxon, Mobil, Marathon, Phillips, BP-Amoco, BPX, BP-Brazil, Penzoil, Shell, Chevron), The Leverhulme Trust.

Public outreach (highlights):

- Invited talks on "Mountains in the Sea" and "Sedimentary Basins" as part of the Geological Society of London Shell Public Lecture Series.
- Invited talks at the Hampstead Scientific Society, the Bath Geological Society, Richmond Scientific Society, the Institute of Physics (London), the Huntingdon and Hillingdon Scientific Society, the Ashmolean Natural History Society of Oxfordshire, the Oxford Geology Trust, the West of England Geology Group of the Geologist Association, Thames Valley Regional Group of the Geological Society, Teme Valley Geological Society, Woolhope Club of Hereford, University of the 3rd Age Malvern and Monmouth Geology Groups and the Crown Colony Club of Virginia.
- Invited talks at the Mendip Rocks 2018 Festival Finale at the Wells and Mendip Museum, the Mendip Rocks Festival 2019 at the Somerset Earth Science Centre, Moons Hill Quarry, Stoke Lane on "Mendip Geology and its Modern Analogues" and the Frome Arts Festival 2027.
- Elected Fellow International of The Explorers Club of New York.
- Interviews on tectonics and seismicity of the SW Pacific region for Radio Australia and Radio New Zealand. Radio 4 and BBC 6 pm and 10 pm TV news interviews on the structure and evolution of the Tonga-Kermadec trench, Louisville Ridge seamount chain and Indo-Australian/Pacific plate boundary.

- Consultative work for the University of Oxford Oxford Sparks animation on "Our mysterious ocean floor". https://www.oxfordsparks.ox.ac.uk/content/our-mysterious-ocean-floor
- Geology Bites podcast on "Seamounts and the Strength of the Lithosphere". https://www.geologybites.com/tony-watts-on-seamounts-and-the-strength-of-the-lithosphere
- Radio Witney podcast on "Volcanoes and Plate Tectonics", Episode 78, www.wrfm.co.uk/on-air/podcasts
- Seafloor Explorer Seminar Series podcast on "Seismic and gravity constraints on the deep structure of the Hawaiian-Emperor Seamount Chain and its implications for plate flexure and mantle rheology"
- Geology Bites podcast on "Mechanics of the Tectonic Plates". https://www.geologybites.com/tony-watts-on-the-mechanics-of-tectonic-plates

Publications (262 peer-reviewed journal articles, 2 books, 2 edited books, 14 book chapters):

1. 1970 Bott, M.H.P. and A.B. Watts, Deep sedimentary basins proved in the Hebridean-Shetland continental shelf and margin, *Nature*, London, 225, 265-268.
2. 1970 Bott, M.H.P. and A.B. Watts, Deep structure of the continental margin adjacent to the British Isles, SCOR Symposium, Cambridge, Report No. 70/14, 91-109.
3. 1970 Bott, M.H.P. and A.B. Watts, The Great Glen Fault in the Shetland area, *Nature*, London, 227, 268.
4. 1971 Watts, A.B., Geophysical investigations on the continental shelf and slope north of Scotland, *Scottish. J. of Geology*, 7, 189-218.
5. 1972 Bott, M.H.P., J.G. Holland, P.J. Storry and A.B. Watts, Geophysical evidence concerning the structure of the Lewisian of Sutherland, N.W. Scotland, *Journal of the Geol. Soc. Lond.*, 128, 599-612.
6. 1972 Haworth, R.T., A.B. Watts and A.K. Goodacre, Gravity measurements in the Gulf of St. Lawrence, *Geol. Surv. Can.*, Paper 71-23, 337-338.
7. 1972 Watts, A.B., Geophysical investigations east of the Magdalen Islands, southern Gulf of St. Lawrence, *Can. J. Earth Science*, 9, 1504-1528.
8. 1974 Watts, A.B. and R.T. Haworth, Geological interpretation of Bouguer anomaly and magnetic anomaly maps east of the Magdalen Islands, Southern Gulf of St. Lawrence, *Marine Sciences Paper No. 10*, 1-9.
9. 1974 Watts, A.B. and M. Talwani, Gravity anomalies seaward of deep-sea trenches and their tectonic implications, *Geophys. J. Roy. Astro. Soc.*, 36, 57-92.
10. 1974 Watts, A.B., A gravity survey of the continental shelf south of Cape Sable, Nova Scotia, *Can. J. Earth Science*, 11, 1329-1334.
11. 1974 Watts, A.B., and J.R. Cochran, Gravity anomalies and flexure of the lithosphere along the Hawaiian-Emperor seamount chain, *Geophys. J. Roy. Astro. Soc.*, 38, 119-141.
12. 1974 Watts, A.B., and J.R. Cochran, Gravity anomalies in the Galapagos Islands Area, *Science*, 84, 808-809.

13. 1975 Watts, A.B., and M. Talwani, Gravity effect of downgoing lithospheric slabs beneath island arcs, *Geol. Soc. Amer. Bull.*, 86, 1-4.
14. 1975 Watts, A.B., J.R. Cochran, G. Selzer, Gravity anomalies and flexure of the lithosphere: A three-dimensional study of the Great Meteor Seamount, N.E. Atlantic, *Jour. Geophys. Res.*, 80, 1391-1398, https://doi.org/10.1029/jb080i011p01391
15. 1975 Watts, A.B. and J.K. Weissel, Tectonic history of the Shikoku Marginal Basin, *Earth and Planet. Sci. Lett.*, 25, 239-250.
16. 1975 Watts, A.B., and J.K. Weissel, Rifting and seafloor spreading in marginal basins: Shikoku Basin, *Bull. Aust. Soc. Explor. Geophys.*, 6, 2/3, 46-47.
17. 1975 Watts, A.B., Marine Gravity, Report to the IUGG on U.S. progress in marine gravity, *Reviews of Geophysics and Space Physics*, 13/3, 532-546.
18. 1975 Weissel, J.K. and A.B. Watts, Tectonic complexities in the South Fiji marginal basin, *Earth and Planet Sci. Lett.*, 28, 121-126.
19. 1975 Watts, A.B. and M. Talwani, Gravity field of the Northwest Pacific Ocean basin and its margin: I. Hawaii and Vicinity, *Geol. Soc. Amer., Spec. Map and Chart Series MC-9.*
20. 1975 Watts, A.B., B.C. Schreiber and D. Habib, Dredged rocks from Hatton Bank, Rockall Plateau, *J. Geol. Soc. London*, 131, 639-646.
21. 1975 Watts, A.B., Gravity field of the Northwest Pacific Ocean basin and its margin: Aleutian Island Arc-Trench System, *Geol. Soc. Amer., Spec. Map and Chart Series MC-10*.
22. 1976 Watts, A.B., Gravity and bathymetry in the Central Pacific Ocean, *Jour. Geophys. Res.*, 81, 1533-1553.
23. 1976 Watts, A.B., M. Talwani, and J.R. Cochran, Gravity field of the Northwest Pacific Ocean basin and its margin, in: Geophysics of the Pacific Ocean basin and its margin, *AGU Monograph* 19, 17-34.
24. 1976 Watts, A.B., Gravity field of the Northwest Pacific Ocean basin and its margin: Philippine Sea, *Geol. Soc. Amer. Spec. Map and Chart Series, MC-12*.
25. 1976 Watts, A.B. and W.B.F. Ryan, Flexure of the lithosphere and continental margin basins, *Tectonophysics*, 36, 25-44.
26. 1977 Watts, A.B., J.K. Weissel and R. L. Larson, Sea-floor spreading in marginal basins of the western Pacific, *Tectonophysics*, 37, 167-181.
27. 1977 Watts, A.B., J.K. Weissel and F.J. Davey, Tectonic evolution of the South Fiji marginal basin, in: Island Arcs, Deep Sea Trenches and Back-Arc Basins, *Maurice Ewing Series*, V. 1, American Geophys. Union, 419-427.
28. 1977 Watts, A.B., and A.R. Leeds, Gravimetric Geoid in the Northwest Pacific Ocean, *Geophys. J. R. astr. Soc.*, 50, 249-277.
29. 1978 Watts, A.B., Comment on "On global gravity anomalies and two-scale mantle convection" by Bruce D. Marsh and James G. Marsh, *Jour. Geophys. Res*., 83, 3551-3554.
30. 1978 Steckler, M.S. and A.B. Watts, Subsidence of the Atlantic-type continental margin off New York, *Earth and Planet. Sci, Lett.*, 41, 1-13.
31. 1978 Watts, A.B., An analysis of isostasy in the world's oceans: 1. Hawaiian-Emperor Seamount Chain, *Jour. Geophys. Res.*, 83, 5989-6004. https://doi.org/10.1029/JB083iB12p05989

32. 1978 Watts, A.B., J.H. Bodine and C.O. Bowin, A Geophysical Atlas East and Southeast Asian Seas: Free-air gravity field, *Geol. Society America Map and Chart Series MC-25*.

33. 1979 Watts, A.B., M.G. Kogan, J.H. Bodine, Gravity field of the Northwest Pacific Ocean Basin and its margin: Kuril Island arc-trench system, *Geol. Society of America Map and Chart Series, MC-27*.

34. 1979 Watts, A.B., Present status of Marine Gravity, Proc. of the 9th GEOP. Conf., An International Symp. on the application of geodesy to geodynamics, Oct. 205, 1978, Dept. of Geodetic Science Rept. No. 280, Ohio State Univ., 251-255.

35. 1979 Bodine, J.H. and A.B. Watts, On lithospheric flexure seaward of the Bonin and Mariana Trenches, *Earth Planet. Science Lett.,* 43, 132-148.

36. 1979 Detrick, R.S. and A.B. Watts, An analysis of isostasy in the world's oceans, 3. Aseismic Ridges, *J. Geophys. Res.*, 84, 3637-3653.

37. 1979 Watts, A.B., On geoid heights derived from Geos 3 altimeter data along the Hawaiian-Emperor Seamount Chain, *J. Geophys. Res.*, 84, 3817-3826.

38. 1979 Weissel, J.K. and A.B. Watts, Tectonic evolution of the Coral Sea Basin, *J. Geophys. Res.*, 84, 4572-4582.

39. 1979 Watts, A.B. and M.S. Steckler, Subsidence and Eustasy at the continental margin of eastern North America, in: Deep Drilling Results in the Atlantic Ocean: Continental Margins and Paleoenvironment, *Maurice Ewing Series*, Volume 3, American Geophysical Union, p. 218-234.

40. 1980 Watts, A.B., J.H. Bodine and N.M. Ribe, Observations of flexure and the geological evolution of the Pacific Ocean basin, *Nature*, London, 283, 532-537.

41. 1980 Watts, A.B., J.H. Bodine and M.S. Steckler, Observations of flexure and the state of stress in the oceanic lithosphere, *J. Geophys. Res.*, 85, 6369-6376.

42. 1980 Steckler, M.S. and A.B. Watts, The Gulf of Lion: Subsidence of a young continental margin, *Nature*, London, 287, 425-429.

43. 1980 Watts, A.B., Plate tectonics: where is it going? *New Scientist*, 6 Nov. 1980, 360-363.

44. 1980 McKenzie, D.P., A.B. Watts, B. Parsons, and M. Roufosse, The planform of mantle convection beneath the Pacific Ocean, *Nature*, 288, 442-446.

45. 1981 Watts, A.B. and S.F. Daly, Long wavelength gravity and topography anomalies, *Annual Reviews in Earth and Planetary Sciences,* 9, 415-448.

46. 1981 Bodine, J.H., M.S. Steckler and A.B. Watts, Observations of flexure and the rheology of the oceanic lithosphere, *J. Geophys. Res.*, 86, 3695-3707.

47. 1981 Watts, A.B. and M.S. Steckler, Subsidence and tectonics of Atlantic type continental margins, Oceanologica Acta, Colloque C3, Geology of Continental Margins, 4, 143-154.

48. 1981 Steckler, M.S. and A.B. Watts, Subsidence history and tectonic evolution of Atlantic-type continental margins, in: R.A. Scrutton (ed.) Dynamics of Passive Margins, *Geodynamics Series,* Volume *6*, A.G.U., Washington, D.C., 184-196.

49. 1981 Watts, A.B., Gravity field of the southwest Pacific Ocean, *Geol. Soc. America*, Map and Chart Series MC-42.

50. 1981 Watts, A.B., The U.S. Atlantic continental margin: Subsidence history, crustal structure and thermal evolution, *American Assoc. Petrol. Geol*. Education Course #19, 75 pp.
51. 1982 Watts, A.B., Gravity anomalies over oceanic rifts, *Geodynamics Series, Vol. 8,* American Geophysical Union, Washington, D.C., 99-106.
52. 1982 Karner, G.D. and A.B. Watts, On isostasy at Atlantic-type continental margins, *J. Geophys. Res*. 87, 2923-2948.
53. 1982 Watts, A.B., Seamounts and flexure of the lithosphere, *Nature*, 297, 182-183.
54. 1982 Watts, A.B., G.D. Karner and M.S. Steckler, Lithospheric flexure and the evolution of sedimentary basins, in: The Evolution of Sedimentary Basins, (ed.) Sr. P. Kent, M.H.P. Bott, D.P. McKenzie and C.A. Williams, *Phil. Trans, Roy. Soc. Lond.*, 305A, 249-281.
55. 1982 Watts, A.B., Tectonic subsidence, flexure and global changes of sea-level, *Nature*, 297, 469-474.
56. 1982 Weissel, J.K., A.B. Watts, and A. Lapouille, Magnetic anomaly evidence for Late Paleocene to Late Eocene seafloor in the southern New Hebrides Basin, *Tectonophysics*, 87, 243-251.
57. 1982 Ribe, N.M. and A.B. Watts, The distribution of intraplate volcanism in the Pacific Ocean: A spectral approach, *Geophys. J. Roy Astr. Soc.* 71, 333-362.
58. 1983 Watts, A.B., The strength of the Earth's crust, *J. Marine Techn*. 17, 12 p.
59. 1983 Karner, G.D. and A.B. Watts, Gravity anomalies and flexure of the lithosphere at mountain ranges, *J. Geophys. Res*. 88, 10,449-10,477.
60. 1983 Davey, F.J. and A.B. Watts, Gravity field of the Southwest Pacific Ocean Basin: New Zealand, Geological Society of America Special Map and Chart Series.
61. 1984 Watts, A.B. and N.M. Ribe, On geoid heights and flexure of the lithosphere at seamounts, *J. Geophys. Res.*, 89, No. B13, 11,152-11,170.
62. 1984 Watts, A.B., K. Horai, N.M. Ribe, On determination of the deflection of the vertical by satellite altimetry, *Marine Geodesy*, 8, No. 1-4, 85-127.
63. 1984 Watts, A.B. and J.A. Thorne, Tectonics, global changes in sea-level and their relationship to stratigraphic sequences at the U.S. Atlantic continental margin, *Marine and Petroleum Geology*, 1, No. 4, 319-339.
64. 1984 Thorne, J.A. and A.B. Watts, Seismic reflectors and unconformities at passive continental margins, *Nature*, 311, No. 5984, 365-368.
65. 1985 Watts, A.B., Gravity, geoid and the oceanic lithosphere, in: Internal Geophysics and Space, Cepadues-Editions, Toulouse, 237-339.
66. 1985 Watts, A.B., J.R. Cochran, P. Patriat, M. Doucoure, A bathymetry and altimetry profile of the Southwest Indian ridge at 31°S, *Earth Planet. Sci, Lett.*, 73, 129-139.
67. 1985 Watts, A.B., D.P. McKenzie, B. Parsons, M. Roufosse, The relationship between gravity and bathymetry in the Pacific Ocean, *Geophys. J. Roy. Astr. Soc.*, 83, 1, 263-298.
68. 1985 Watts, A.B., U. ten Brink, P. Buhl, T. Brocher, A multi-channel seismic study of lithospheric flexure across the Hawaiian-Emperor seamount chain, *Nature*, 315, 6015, 105-111.

69. 1985 ten Brink, U.S., and A.B. Watts, Seismic stratigraphy of the flexural moat flanking the Hawaiian Islands, *Nature*, 317, No. 6036, 421-424.

70. 1985 Watts, A.B., G.D. Karner, P. Wessel and J. Hastings, Global Gravity Data Bank System, L-DGO Technical Report No. 4 CU-1-85, 108 pp.

71. 1986 Bally, A.W., I-Ming Chou, R. Clayton, H.P. Eugster, S. Kidwell, L.D. Meckel, R.T. Ryder, A.B. Watts, and A.A. Wilson, Notes on Sedimentary Basins in China, U.S.G.S. Open File Report 86-327, 108 pp.

72. 1986 Bell, R. E. and A.B. Watts, Evaluation of the BGM-3 sea gravity meter system on board R.V. CONRAD, *Geophysics*, 51, 1480-1493.73.7737

73. 1987 Bell, R. E. and A. B. Watts. Evaluation of the BGM-3 Sea Gravity Meter System Onboard R/V Conrad - Reply, *Geophysics*, 52, 697-697

74. 1987 Poag, C.W. and A.B. Watts. Background and objectives of the New Jersey transect: Continental slope and upper rise, *Intitial Reports of the Deep Sea Drilling Project*, 95, 15-27.

75. 1987 Poag, C. W.; Watts, A. B.; Cousin, M.; Goldberg, D.; Hart, D.; Miller, K. D.; Mountain, G. S.; Nakamura, Y.; Palmer, A.; Schiffelbein, P. A.; Tarafa, M.; Thein, J. E.; Valentine, P. C. and R. H. Wilkins, Site-612, *Initial Reports of the Deep Sea Drilling Project*, 95, 31-153.

76. 1987 Poag, C. W.; Watts, A. B.; Cousin, M.; Goldberg, D.; Hart, D.; Miller, K. D.; Mountain, G. S.; Nakamura, Y.; Palmer, A.; Schiffelbein, P. A.; Tarafa, M.; Thein, J. E.; Valentine, P. C. and R. H. Wilkins, Site-613, *Initial Reports of the Deep Sea Drilling Project*, 95, 155-241.

77. 1988 Steckler, M.S., A.B. Watts and J.A. Thorne, Subsidence and basin modeling at the U.S. Atlantic passive margin, in: Grow, J.A. and Sheridan, R.E. (eds.), The Atlantic Continental Margin, U.S. Geological Society of America, The Geology of North America, v. I-2, 399-416.

78. 1988 Wessel P. and A.B. Watts, On the accuracy of marine gravity measurements, *Jour. Geophys. Res*., 93, 393-413.

79. 1988 Watts, A.B., R.A. Duncan and R.L. Larson, The origin of the Louisville Ridge and its relationship to the Eltanin Fracture Zone system, *Jour. Geophys. Res.,* 93, 3051-3077.

80. 1988 Watts, A.B., Gravity anomalies, crustal structure and flexure of the lithosphere at the Baltimore Canyon Trough, *Earth and Planet. Sci. Lettrs*., 89, 221-238.

81. 1989 Thorne, J.A. and A.B. Watts, A quantitative analysis of North Sea subsidence, *Am. Ass. Pet. Geol.*, 73, 88-116.

82. 1989 Watts, A.B. and U. S. ten Brink, Crustal structure, flexure and subsidence history of the Hawaiian Islands, *Jour. Geophys. Res*., 94, 10,473-10,500.

83. 1989 Watts, A.B. and K.G. Cox, The Deccan Traps: An interpretation in terms of progressive lithospheric flexure in response to a migrating load, *Earth and Planet Sci. Lettrs*., 93, 85-97.

84. 1989 Smith, W.H.F., H. Staudigel, A.B. Watts, and M.S. Pringle, The Magellan Seamounts: Early Cretaceous record of the South Pacific isotopic and thermal anomaly, *Jour. Geophys. Res*., 94, 10,501-10,523.

85. 1989 Watts, A.B., Lithospheric Flexure due to Prograding Sediment Loads: Implications for the origin of Offlap/Onlap patterns in Sedimentary Basins, *Basin Res*., 2, 133-144.

86. 1990 Watts, A.B., Torné, M., Buhl, P., Mauffret, A., Pascal, G. and Pinet,B., Evidence for reflectors in the lower continental crust before rifting in the Valencia Trough, *Nature*, 348,631-635,.

87. 1991 Coakley, B.J. and A.B.Watts, Tectonic controls on the development of Unconformities: The North Slope, Alaska, *Tectonics*, 10,101-130

88. 1991 Sahagian, D. and A.B. Watts, Introduction to Special Section on "Measurement, causes and consequences of long-term sea-level changes", *J. Geophys. Res.*, 96, 6585-6589.

89. 1991 Sinclair, H., Coakley, B., Allen, P.A. and A.B. Watts, Simulation of foreland basin stratigraphy using a diffusion model of mountain belt uplift and erosion: An example from the Central Alps, Switzerland.*Tectonics*., 10, 101-130.

90. 1992 Torné, M., Pascal, G., Buhl, P., Watts, A.B. and Mauffret, A., Crustal and velocity structure of the Valencia trough (Western Mediterranean). Part I: A combined refraction/wide-angle reflection and near-vertical reflection study. In: E. Banda and P.Santanach (eds.)*Tectonophysics*. 203, 1-20.

91. 1992 Torné, M., Pascal, G., Buhl, P., Watts, A.B. and Mauffret, A., Crustal and velocity structure of the Valencia trough (Western Mediterranean). Part II: Detailed interpretation of five Expanded Spread Profiles. In: E. Banda and P. Santanach (eds.) *Tectonophysics*. 203, 1-20.

92. 1992 Maillard, A., Mauffret, A., Watts, A.B., Torné, M., Pascal, G., Buhl, P. and Pinet, B. Tertiary sedimentary history and structure of the Valencia Trough (Western Mediterranean). In: E. Banda and P.Santanach (eds.) *Tectonophysics*. 203, 57-75.

93. 1992 Watts, A.B., The Formation of Sedimentary Basins. In "Understanding the Earth", Chapter 15, *Cambridge University Press*.

94. 1992 Watts, A. B. and M.Torné, Crustal structure and the mechanical properties of extended continental lithosphere in the Valencia trough (western Mediterranean). *J. Geol. Soc. Lond.,* 149, 813-827.

95. 1992 Watts, A.B. and M.Torné, Crustal structure, Subsidence History and Thermal Evolution of the Valencia Trough : A young extensional basin in the Western Mediterranean, *J. Geophys.Res.,*97, 20,021 - 20,041.

96. 1992 Watts, A. B. The elastic thickness of the lithosphere and the evolution of foreland basins. *Basin Research* , 4, 169-178.

97. 1993 Goodwillie, A.M. and A. B. Watts. An altimetric and bathymetric study of elastic thickness in the Central Pacific Ocean. *Earth Planet. Sci. Lett.,* 118, 311-326.

98. 1993 Watts, A. B., J. Platt and P. Buhl. Tectonic evolution of the Alboran Sea basin. *Basin Research*, 5, 153-177, doi:10.1111/j.1365-2117.1993.tb00063.x

99. 1994 Watts, A.B. Crustal Structure, Gravity anomalies and flexure of the Lithosphere in the vicinity of the Canary Islands. *Geophys. J. Intern.,* 119, 648-666.

100. 1994 Collier, J. P. Buhl, M. Torné and A, B. Watts. Crustal structure of the Valencia Trough (Western Mediteranean) from two-ship Seismic Reflection and Refraction Data. *Geophys. J. Intern.* 118, 159-180.

101. 1995 Banda, E., Torné, M., Watts, A.B. and the IAM group, Iberian Atlantic Margins Group Investigates Deep Structure of Ocean Margins. *EOS*, 76, 25-26.

102. 1995 Watts, A. B. and C. Marr, Gravity anomalies and the thermal and mechanical structure of rifted continental margins. In "Rifted Ocean-Continent Boundaries". Banda. E., Talwani, M. and Torné, M. (eds.), Kluwer Academic Publishers. 65-94.

103. 1995 Watts, A.B., S. Lamb, J. D. Fairhead and J. F. Dewey, Lithospheric flexure and bending of the Central Andes. *Earth Planet. Sci. Letts.,* 134, 9-21

104. 1995 Watts, A. B. and D. G. Masson, A giant landslide on the north flank of Tenerife, Canary Islands. *J. Geophys. Res.,* 100, 24,487-24,498.

105. 1995 Masson, D. G. and A. B. Watts, Slope failures and debris avalanches on the flanks of volcanic oceanic islands, *Landslide News*, 9, 21-24

106. 1996 Hartley, R., Watts, A. B. and J. D. Fairhead. Isostasy of Africa, *Earth Planet. Sci. Letts.,* 137, 1-18.

107. 1997 Watts, A. B., Peirce, C., Collier, J., Dalwood, R., Canales, J-P. and T.J. Henstock, A seismic study of lithospheric flexure at Tenerife, Canary Islands. *Earth Planet. Sci. Letts.* 146, 431-448.

108. 1997 Stewart, J. and A. B. Watts, Gravity anomalies and spatial variations of flexural rigidity at mountain ranges. *J. Geophys. Res.* 102, 5327-5352.

109. 1997 Watts, A. B. and J. D. Fairhead, Gravity anomalies and magmatism at the western margin of the British Isles. *J. Geol. Soc. London.* 154, 523-529.

110. 1997 Collier, J. and A. B. Watts, Seismic reflection profile constraints on lithospheric extension : Pure and Simple. *Geophys. J. Int.* 129, 737-748.

111. 1997 Collier, J., Dañobeitia, J. J., Watts, A.B. & CD82 Scientific Party, Evidence for low-angle, planar faults in slow-spreading oceanic crust. *Geology*, 25, 1075-1078.

112. 1998 Watts, A. B. and J. Stewart, Gravity anomalies and segmentation of the West Africa continental margin. *Earth Planet. Sci. letts*. 156, 239-252.

113. 1998 Madon, M. and A. B. Watts, Gravity anomalies over the Penyu and Malay basin, SE Asia. *Basin Research,* 10, 375-392.

114. 1998 Watts, A. B. and D. G. Masson, Reply to comment on "A giant landslide on the north flank of Tenerife, Canary Islands, *J. Geophys. Res.* 103, 9949-9952.

115. 1998 Collier, J., Henstock, T. J., C. Peirce and A. B. Watts, A detailed geophysical study in the Canary Basin (eastern Atlantic): implications for the internal structure of 130 Ma oceanic crust. *Geophys. J. Int*., 135, 943-963.

116. 1999 Urgeles, R., Masson, D. G., Canals, M., Watts, A. B., and LeBas, T. P, Recurrent large-scale landsliding on the west flank of La Palma, Canary Islands. *J. Geophys. Res.*, v. 104, 25,331-25,348.

117. 1999 Watts, A. B. and J. D. Fairhead, A process-oriented approach to the interpretation of the gravity anomaly signature at continental margins, *Leading Edge*, February, 258-263.

118. 1999 Gee, M. D. G. Masson, A. B. Watts and P. A. Allen, The Saharan debris flow : an insight into the mechanics of long runout submarine debris flows, *Sedimentology*, 46, 317-335.

119. 1999 Haddad, D. and A. B. Watts, Gravity anomalies and flexure of the lithosphere at the Papua-New Guinea foreland basin. *Tectonics*. 18, 827-842.

120. 1999 Higgs, R., Madon, M. and A. B. Watts, Discussion on "Gravity anomalies, subsidence history and the tectonic evolution of the Malay and Penyu basins (offshore peninsula Malaysia)". *Basin Research*. 11, 285-290.

121. 1999 Hayward, N., A. B. Watts, G. K. Westbrook and J. Collier, A Seismic Reflection and GLORIA study of Compressional Deformation in the Gorringe Bank region. *Geophys. J. Int.* 138, 831-850

122. 1999 Comas, M. C., J. P. Platt, J. I. Soto and A. B. Watts, The origin and tectonic history of the Alboran basin: insights from Leg 161 results, In Zahn, R., Comas, M. C. and Klaus, A. (eds), *Proceedings of the Ocean Drilling Program*, Scientific Results, Vol 161, 555-580.

123. 1999 Watts, A. B., The growth and decay of oceanic islands. In "Geomorphology and Plate Tectonics", M. A. Summerfield (ed), *John Wiley and Sons Ltd*. 339-360.

124. 2000 Stewart, J., A. B. Watts and J. Bagguley, Three-dimensional analysis of gravity anomalies, subsidence history and crustal structure at the continental margin offshore Namibia. *Geophys. J. Int.,* 141, 724-746.

125. 2000 Watts, A. B. and S. Zhong, Observations of flexure and the rheology of the oceanic lithosphere. *Geophys. J. Int.* 142, 855-875.

126. 2000 Watts, A. B., W. S. McKerrow and E. Fielding, Lithospheric flexure, uplift and landscape evolution in south-central England. *J. Geol. Soc. London.* 157, 1169-1177.

127. 2000 Canales, J.P., J. J. Dañobeitia and A. B. Watts, Wide-angle seismic constraints on the internal structure of Tenerife, Canary Islands, *J. Volcan. and Geotherm. Res.* 103, 65-81, 2000

128. 2001 Gee, M. J. R., D. G. Masson, A. B. Watts and N. C. Mitchell, Offshore continuation of volcanic rift zones, El Hierro, Canary Islands. *J. Volcan. and Geotherm. Res.* 105, 107-119.

129. 2001 Gee, M. J. R., D. G. Masson, A. B. Watts and P. A. Allen, Passage of debris flows and turbidity currents through a topographic constriction: Seafloor erosion and deflection of pathways. *Sedimentology*, 48, 1389-1411

130. 2001 Gee, M. J., A. B. Watts, D. G. Masson, N. C. Mitchell, Landslides and the evolution of El Hierro in the Canary Islands. *Marine Geology*, 177, 271-293.

131. 2001 Watts, A. B. and D. G. Masson, New sonar evidence for recent catastrophic collapses of the north flank of Tenerife, Canary Islands. *Bull. Volcanology.* 63, 8-19.

132. 2001 Haddad, D., A. B. Watts and J. Lindsay, Evolution of the intracratonic Officer basin, central Australia: implications from subsidence analysis and gravity modelling. *Basin Research*, 13, 217-238.

133. 2001 Watts, A. B., W. S. McKerrow and E. Fielding, "Discussion on lithospheric flexure, uplift and landscape evolution in south-central England – Reply to J. C. W. Cope", *J. Geol. Soc. London*, 158, 725-727.

134. 2001 Watts, A. B., Gravity anomalies, flexure and, crustal structure at the Mozambique rifted margin, *Marine and Petroleum Geology*, 18, 445-455.

135. 2001 Collier, J.S and A. B. Watts, Lithospheric response to volcanic loading by the Canary islands: Constraints from seismic reflection data in their flexural moats. *Geophys. J. Int*. 147, 660-676.

136. 2001 Watts, A. B., W. S. McKerrow and E. Fielding, "Discussion on lithospheric flexure, uplift and landscape evolution in south-central England – Reply to M. Simms and D. T. Donovan", *J. Geol. Soc. London*. 158, 877-879.

137. 2001 Armstrong, G. and A. B. Watts, Spatial variations in Te in the southern Appalachians, Eastern United States. *J. Geophys. Res.* 106, 22,009-22,026.

138. 2001 Watts, A. B. "*Isostasy and Flexure of the Lithosphere*", 1st Edition, Cambridge University Press. 458 pp.

139. 2002 Masson, D. G., A. B. Watts, M. J. R. Gee, R. Urgeles, N. C. Mitchell, T. P. Le Bas and M. Canals, Slope failures on the flanks of the western Canary Islands. *Earth Sci. Rev*. 57, 1-35.

140. 2002 Lin, A. T.-S. and A. B. Watts, Origin of the West Taiwan basin by orogenic loading and flexure of a rifted continental margin. *J. Geophys. Res*. 107, No B9, 2185, doi:10.1029/2001JB000669.

141. 2002 Zhong, S. and A. B. Watts, Constraints on the dynamics of mantle plumes from uplift of the Hawaiian Islands. *Earth Planet. Sci Letts*., 203, 105-116.

142. 2002 Mitchell, N. C., D. G. Masson, A. B. Watts, M. J. R. Gee and R. Urgeles, The morphology of the submarine flanks of volcanic ocean islands: A comparative study of the Canary and Hawaiian hotspot islands, *J. Volcan. Geotherm. Res.,* 115, 83-107.

143. 2003 Ali, M. Y., A. B. Watts, I. Hill, A seismic reflection profile study of lithospheric flexure in the vicinity of the Cape Verde islands, *J. Geophys. Res*. 108, 2239, doi:10.1029/2002JB002155.

144. 2003 Watts, A. B. and E. B. Burov, Lithospheric strength and its relationship to the elastic and seismogenic layer thickness, *Earth Planet. Sci. Letts*., 213, 113-131. https://doi.org/10.1016/S0012-821X(03)00289-9

145. 2003 Lin A, T-S, A. B. Watts and S. Hesselbo, Cenozoic stratigraphy and subsidence history of the South China Sea margin in the Taiwan region, *Basin Research*, 15, 453-478.

146. 2004 Pérez-Gussinyé, M., A. R. Lowry, A. B. Watts and I. Veligcogna, On the recovery of effective elastic thickness using spectral methods: Examples from synthetic data and from the Fennoscandia shield. *J. Geophys. Res*. 108, doi:10.1029/2003JB002788.

147. 2004 Hillier, J. K. and A. B. Watts, The “plate-like” subsidence of the East Pacific Rise – South Pacific Superswell system. *J. Geophys. Res*. 109, doi: 10.1029/2004JB003041.

148. 2005 Watts, A. B., W. S. McKerrow and K. Richards, Localised Quaternary uplift of south-central England. *J. Geol. Soc. London*, 162, 13-24

149. 2005 Corfield, R., A. B. Watts and M. P. Searle, Subsidence history of the north Indian continental margin, Zanskar-Ladakh Himalaya, NW India. *J. Geol. Soc. London*, 162, 135-146.

150. 2005 Hillier, J. K. and A. B. Watts, The relationship between depth and age in the North Pacific ocean, *J. Geophys. Res*, 110, https://doi.org/10.1029/2004JB003406

151. 2005 Pérez-Gussinyé, M. and A. B. Watts, The long-term strength of Europe and its implications for plate forming processes, *Nature*, 436, doi:10.1038/nature03854

152. 2005 Corfield, R. I., A. B. Watts and M. P. Searle, Discussion on subsidence history of the north Indian continental margin, Zanskar-Ladakh Himalaya, NW India: Reply to E. Garzanti, D. Sciunnach and M. Gaetani, *J. Geol. Soc. London*, 162, 889-892.

153. 2005 Ali, M. A., A. B. Watts and I. Hill, Structure of Mesozoic oceanic crust in the vicinity of the Cape Verde islands from seismic reflection profiles, *Marine Geophys. Res*., 24, 329-343

154. 2005 Jordan, T. A. and A. B. Watts, Gravity anomalies, flexure and the elastic thickness structure of the India-Eurasia collisional system, *Earth Planet. Sci. Letts*., 236, 732-750.

155. 2006 Burov, E. B. and A. B. Watts, The long-term strength of continental lithosphere: "jelly sandwich" or "crème-brûlée", *GSA Today*, 16, 4-10.

156. 2006 Robinson, D. P., S. Das, and A. B. Watts, Earthquake rupture stalled by a subducting fracture zone, *Science*, 312, 1203-1205.

157. 2006 Watts, A. B., D. T. Sandwell, W. H. F. Smith, and P. Wessel, Global gravity, bathymetry, and the distribution of submarine volcanism through space and time, *J. Geophys. Res*., 111, https://doi.org/10.1029/2005JB004083.

158. 2006 Wyer, P., and A. B. Watts, Gravity anomalies and segmentation at the East Coast, USA continental margin, *Geophys. J. Int,* https://doi.org/10.1111/j.1365-1246X.2006.03066.x.

159. 2006 Rodger, M., A. B. Watts, C. J. Greenroyd, C. Peirce, and R. W. Hobbs, Evidence for unusually thin oceanic crust and strong mantle beneath the Amazon Fan, *Geology*, 34, 1081-1084; https://doi.org/1010.1130/G22966A.22961.

160. 2007 Hillier, J. K. and A. B. Watts, Global distribution of seamounts from ship-track bathymetry data", *Geophys. Res. Letters*, 34, https://doi.org/10.1029/2007GL029874

161. 2008 Pérez-Gussinyé, M., A. R. Lowry, A. B. Watts, Effective elastic thickness of South America and its implications for intracontinental deformation, G^3, 8, https://doi.org/10.1029/2006GC001511

162. 2007 Greenroyd, C. J., C. Peirce, M. Rodger, A. B. Watts, R. W. Hobbs, Crustal structure of the French Guiana margin, West Equatorial Atlantic, *Geophysical J. Int.* 169, https://doi.org/10.1111/j.1365-246X.2007.03372.x

163. 2007 Watts, A. B., "An overview", In Treatise on Geophysics (Ed. G. Schubert) Volume 6. Crust and Lithosphere Dynamics (Ed. A. B. Watts), Elsevier B.V., 1-49.

164. 2007 Lane, N., A. B. Watts, A. Farrant, "An analysis of Cotswold topography: Insights into the landscape response to denudational isostasy". *J. Geol. Soc. London*., 165, 85-103.

165. 2008 Greenroyd, C., C. Peirce, M. Rodger, A. B. Watts, R. W. Hobbs, "Demerara Plateau - the structure and evolution of a transform passive margin", *Geophys. J. Int.*, 172, https://doi.org/10.1111/j.1365-246X.2007.03662.x

166. 2008 Pim, J., C. Peirce, A. B. Watts, I. Grevemeyer, A. Krabbenhoeft, "Crustal structure and origin of the Cape Verde Rise", *Earth Planet. Sci. Letts*., 272, 422-428.

167. 2008 Greenroyd, C., C. Peirce, M. Rodger, A. B. Watts, R. W. Hobbs, "Do fracture zones define continental margin segmentation? - evidence from the French Guiana margin", *Earth Planet. Sci. Letts.*, 272, 553-566.

168. 2009 Ali, M. and A. B. Watts, "Subsidence history, gravity anomalies and flexure of the United Arab Emirates foreland basin", *GeoArabia*, 14, 17-44.

169. 2009 Close, D. I., A. B. Watts, H. M. J. Stagg, "A marine geophysical study of the Wilkes land rifted continental margin, Antarctica", *Geophys. J. Int.,* 177, 430-450.

170. 2009 Das, S. and A. B. Watts, "Effect of subducting seafloor topography on the rupture characteristics of great subduction zone earthquakes" S. Lallemand and F. Funiciello (Eds.), Subduction Zone Geodynamics, https://doi.org/10.1007/978-3-540-87974-9, Springer-Verlag, 103-118.

171. 2009 Lane, N., A. B. Watts, A. Farrant, Reply to discussion on "An analysis of Cotswold topography: insights into the landscape response to denudational isostasy", *J. Geol. Soc. London*, 166, 584.

172. 2009 Watts, A. B., M. Rodger, C. Peirce, C. Greenroyd, R. W. Hobbs,"Seismic structure, gravity anomalies and flexure of the Amazon continental margin, NE Brazil", *J. Geophys. Res*., https://doi.org/10.1029/2008JB006259,

173. 2009 Kalnins, L. and A. B. Watts, "Spatial variations in effective elastic thickness in the western Pacific Ocean and their implications for Mesozoic volcanism", *Earth Planet. Sci. Letts*., https://doi.org/10.1016/j.epsl.2009.06.018, 286, 89-100.

174. 2010 Contreras-Reyes, E., I. Grevemeyer, A. B. Watts, L. Planert, E.R. Flueh, C. Peirce, "Crustal intrusion beneath the Louisville hotspot track", *Earth Planet. Sci. Letts*., 289, 323-333.

175. 2010 Koppers, A. A. P. and A. B. Watts, "Seamounts as a window to physical and chemical geodynamics", Special Volume on "Mountains in the Sea", *Oceanography*, 23, 42-57.

176. 2010 Watts, A. B., A. A. P. Koppers and D. Robinson, "Seamount subduction and earthquakes", Special Volume on "Mountains in the Sea", *Oceanography*, 23, 166-173, 2010.

177. 2010 Cunha, T. A., A. B. Watts, L. M. Pinheiro, R. Myklebust, "Seismic and gravity anomaly evidence of large-scale deformation off SW Portugal", *Earth Planet Sci. Letts*., https://doi.org/10.1016/j.epsl2010.01.047

178. 2010 Wilson, D. J., C. Peirce, A. B. Watts, I. Grevemeyer, A. Krabbenhoeft, "Uplift at lithospheric swells I: seismic and gravity constraints on the crust and

uppermost mantle structure of the Cape Verde mid-plate swell", *Geophys. J. Int.*, 182, 531-550

179. 2010 Lamb, S. and A. B. Watts, "The origin of mountains – implications for the behavior of Earth's lithosphere", Current Science, Perspectives in Earth Sciences – 2010, 99, 1699-1718.
180. 2011 Watts, A. B., "Isostasy", Encyclopedia of Solid Earth Geophysics, Gupta, H. (Ed.), 647-662, Springer.
181. 2011 Contreras-Reyes, E., I. Grevemeyer, A. B. Watts, E. R. Flueh, C. Peirce, S. Moeller, C. Papenberg, "Deep seismic structure of the Tonga subduction zone: Implications for mantle hydration, tectonic erosion, and arc magmatism", *J. Geophys. Res*., 116, https://doi.org/1029/2011JB008434
182. 2012 Watts, A. B., "Models for the evolution of passive margins", Regional Geology and Tectonics: Phanerozoic Rift Systems and Sedimentary Basins, Editors: D. G. Roberts and A. W. Bally. Volume 1B, Chapter 3, 33-58, Elsevier, Amsterdam, https://doi.org/10.1016/B978-0-444-56356-9.00002-X
183. 2012 Hutton, E. W. H., J. P. M. Syvitski and A. B. Watts, "Isostatic flexure of a finite slope due to sea-level rise and fall", *Computers & Geosciences*, https://doi.org/10.1016/ j.cageo.2012.03.020
184. 2012 Watts, A. B., C. Peirce, I. Grevemeyer, M. Paulatto, W. Stratford, D. Bassett, J. A. Hunter, L. M. Kalnins, and C. E. J. de Ronde, "Rapid rates of growth and collapse of Monowai submarine volcano in the Kermadec Arc", *Nature Geoscience*, https://doi.org/10.1038/NGEO1473
185. 2013 Ali, M. Y., A. B. Watts and M. P. Searle, "Seismic stratigraphy and subsidence history of the United Arab Emirates (UAE) rifted margin margin and overlying foreland basins", Lithosphere Dynamics and Sedimentary Basins: The Arabian plate and analogues, Editors: K. A. Al Hosani et al., 127-144, Springer-Verlag Berlin Heidelberg, 474 pp. https://doi.org/10.1007/978-3-642-30609-9_6
186. 2013 Wilson, D. J., C. Peirce, A. B. Watts, I. Grevemeyer, "Uplift at lithospheric swells—II: is the Cape Verde mid-plate swell supported by a lithosphere of varying mechanical strength?", *Geophys. J. Int.*, https://doi.org/10.1093/gji/ggt034
187. 2013 Martinez-Garcia, P., M. Comas, J. I. Soto, L. Lonergan, A. B. Watts, "Strike-slip tectonics and partial inversion in the Western Mediterranean: the Post-Messinian basin evolution of the Alboran Sea", *Basin Research.* 25, 1–27, https://doi.org/10.1111/bre.12005
188. 2013 Ali, M. Y. and A. B. Watts, "Subsidence history, crustal structure and evolution of the Somaliland-Yemen conjugate margin", *J. Geophys. Research,* 118, 1-12*,* https://doi.org/10.1002/jgrb.50113.
189. 2013 Timm, C., D. Bassett, I.J. Graham, M. Leybourne, Cornel E.J. de Ronde, J. Woodhead and A. B. Watts, "Louisville seamount subduction and its implication on mantle flow beneath the central Tonga-Kermadec arc.", *Nature Communications*, https://doi.org/10.1038/ncomms2702.
190. 2013 Maystrenko, Y. P., M. Scheck-Wenderoth, A. Hartwig, Z. Anka, A. B. Watts, K. K. Hirsch, S. Fishwick, "Structural features of the Southwest African continental margin according to results of lithosphere-scale 3D gravity

and thermal modeling", *Tectonophysics*. 604, 104-121, http://doi.org/10.1016/j.tecto.2013.04.014

191. 2013 Watts, A. B., S. Zhong and J. Hunter, "Lithosphere behavior on seismic through geologic time-scales". *Annual Review of Earth and Planetary Sciences. 41,* 443-468*,* https://doi.org/10.1146/annurev-earth-042711-105457

192. 2013 Mouthereau F, A. B. Watts, E. Burov, "Structure of orogenic belts controlled by lithospheric age." *Nature Geoscience*, https://doi.org/10.1038/NGEO902

193. 2013 Zhong S. J. and A. B. Watts, "Lithospheric deformation induced by loading of the Hawaiian Islands and its implications for mantle rheology". *J. Geophys. Res.* 118: 6025-6048, https://doi.org/10.1002/2013JB010408

194. 2013 West A. J., M. Fox, R. T. Walker, A. Carter, T. Harris et al., "Links between climate, erosion, uplift, and topography during intracontinental mountain building of the Hangay Dome, Mongolia". *Geochemistry Geophysics Geosystems* 14, https://doi.org/10.1002/2013GC004859

195. 2014 Paulatto M, A. B. Watts, C. Peirce, "Potential field and high-resolution bathymetry investigation of the Monowai volcanic centre, Kermadec Arc: implications for caldera formation and volcanic evolution". *Geophys. J. Int.,* https://doi.org/10.1093/gji/ggt512

196. 2014 Ali, M. Y., A. B. Watts and A. Farid, "Gravity anomalies of the United Arab Emirates: Implications for basement structures and infra-Cambrian salt distribution", *Geoarabia*, 19, 85-112, doi: https://doi.org/10.1016/j.tecto.2017.06.006

197. 2014 Nomikou P, M.M. Parks, D. Papanikolaou, D.M. Pyle, T. A. Mather et al., "The emergence and growth of a submarine volcano: The Kameni islands, Santorini (Greece)". *GeoResJ,* 1-2, 8-18, http://dx.doi.org/10.1016/j.grj.2014.02.002

198. 2014 Funnell, M. J., C. Peirce, W. R. Stratford, M. Paulatto, A. B. Watts, and I. Grevemeyer, "Structure and deformation of the Kermadec forearc in response to subduction of the Pacific oceanic plate", *Geophys. J. Int.*, *199*, 1286-1302, https://doi.org/10.1093/gji/ggu330

199. 2015 Stratford, W., C. Peirce, M. Paulatto, M. Funnell, A. B. Watts, I. Grevemeyer, and D. Bassett, "Seismic velocity structure and deformation due to the collision of the Louisville Ridge with the Tonga-Kermadec Trench", *Geophys. J. Int*., 200, 1503-1522, https://doi.org/10.1093/gji/ggu475

200. 2015 Ali, M. Y. and A. B. Watts, "Tectonic evolution of sedimentary basins of northern Somalia", *Basin Research*, 1-25, https://doi.org/10.1111/bre.12113

201. 2015 Watts, A. B., P. Nomikou, J. D. P. Moore, M. M. Parks, M. Alexandri, "Historical bathymetric charts and the evolution of Santorini submarine volcano, Greece", *Geochemistry Geophysics Geosystems.* 16, https://doi.org/10.1002/2014GC005679

202. 2015 Bassett, D. and A. B. Watts, "Gravity anomalies, crustal structure and seismicity at subduction zones: Part 1 - Seafloor roughness and subducting relief", *Geochemistry Geophysics Geosystems.* https://doi.org/10.1002/2014GC005684

203. 2015 Bassett, D. and A. B. Watts, "Gravity anomalies, forearc structure and seismicity in subduction zones: Part 2 - Interrelationships between crustal structure and seismogenic behaviour", *Geochemistry, Geophysics, Geosystems*, https://doi.org/10.1002/2014GC005685

204. 2015 Grevemeyer, I., E. Gràcia, A. Villaseñor, W. Leuchters, A. B. Watts, "Seismicity and active tectonics in the Alboran Sea, Western Mediterranean: Constraints from an offshore-onshore seismological network and swath bathymetry data", *J. Geophys. Res.* 120, https://doi.org/10.1002/2015JB012073

205. 2015 Pilia, S., M. Y. Ali, A. B. Watts, M. Searle, "UAE-Oman mountains give clues to oceanic crust and mantle rocks", *EOS*, 96, https://doi.org/10.1029/2015EO040937

206. 2016 Døssing, A., P. Japsen, A. B. Watts, T. Nielson, W. Jokat, H. Thybo, T. Dahl-Jensen, "Miocene uplift of the NE Greenland margin linked to plate tectonics: Seismic evidence from the Greenland Fracture Zone, NE Atlantic", *Tectonics,* https://doi.org/10.1002/2015TC004079

207. 2016 Bassett, D., D. T. Sandwell, Y. Fialko, A. B. Watts, "Residual topography and gravity anomalies reveal structural controls on co-seismic slip in the 2011 M_w 9.0 Tohoku-oki earthquake", *Nature* 531, 92–96, https://doi.org/10.1038/nature16945.

208. 2016 Metz, D., A. B. Watts, I. Grevemeyer, M. Rodgers, M. Paulatto, "Ultra long range hydroacoustic observations of submarine volcanic activity at Monowai, Kermadec Arc*, Geophys. Res. Letts.,* https://doi.org/10.1002/2015GL067259

209. 2016 Hunter, J. and A. B. Watts, "Gravity anomalies, flexure and mantle rheology seaward of Circum-Pacific trenches", *Geophys. J. Int.,* 207, 288-316, https://doi.org/10.1093/gji/ggw275

210. 2016 Paxman, G., A. B. Watts, F. Ferraccioli, T. A. Jordan, R. E. Bell, S. S. R. Jamieson and C. A. Finn, "Erosion-driven uplift in the Gamburtsev Subglacial Mountains of East Antarctica", *Earth Planet. Sci. Letts.*, 452, 1-14, https://doi.org/10.1016/j.epsl.2016.07.040211

211. 2016 Nomikou, P., T. H. Druitt, C. Hübscher, T. A. Mather, M. Paulatto, L. M. Kalnins, K. Kelfoun, D. Papanikolaou, K. Bejelou1, D. Lampridou, D. M. Pyle, S. Carey, A. B. Watts, M. M. Parks, "Post-eruptive flooding of Santorini caldera and implications for tsunami generation", *Nature Communications,* https://doi.org/10.1038/ncomms13332

212. 2016 Walker, R. T., M. Telfer, R. L. Kahle, A. Buta-Neto, M. W. Dee, B. Kahle, J.-L. Schwenninger, R. A. Sloan, C. Tunguno, A. B. Watts, "Rapid mantle-driven uplift along the Angolan margin in the late Quaternary", *Nature Geoscience,* 909-914*,* https://doi.org/10.1038/NGEO2835.

213. 2016 Bassett, D., H. Kopp, R. Sutherland, S. Henrys, A. B. Watts, C. Timm, M. Scherwath, I. Grevemeyer, C. E. J. de Ronde, "Crustal structure of the Kermadec arc from MANGO seismic refraction profiles", *J. Geophys. Res.* 121, 7514–7546, https://doi.org/10.1002/2016JB013194.

214. 2017 Paxman, G. J. G., S. S. R. Jamieson, F. Ferraccioli, M. J. Bentley, R. Forsberg, N. Ross, A. B. Watts, H. F. J. Corr, T. A. Jordan, "Uplift and tilting of

the Shackleton Range in East Antarctica driven by glacial erosion and normal faulting", *J. Geophys. Res.,* https://doi.org/10.1002/2016JB013841

215. 2017 Tozer, B., A. B. Watts, M. C. Daly, "Crustal structure, gravity anomalies and subsidence history of the Parnaíba cratonic basin, Northeast Brazil", *J. Geophys. Res.*, 122, 5591-5621, https://doi.org/10.1002/2017JB014348

216. 2017 Watts, A. B. and J. D. P. Moore, "Flexural isostasy: Constraints from gravity and topography power spectra", *J. Geophys. Res.*, 122, https://doi.org/10.1002/ 2017JB014571

217. 2017 Martínez-García, P., M. Comas, L. Lonergan, A. B. Watts, "From extension to shortening: tectonic inversion distributed in time and space in the Alboran Sea, Western Mediterranean", *Tectonics,* https://doi.org/10.1002/2017TC004489

218. 2018 Ali, M. Y., S. Aidarbayev, M.P. Searle, A. B. Watts, "Crustal Structure, Subsidence History and Seismic Stratigraphy of the Western Musandam Peninsula, Oman - United Arab Emirates (UAE) Mountains", *Tectonics,* https://doi.org/10.1002/2017TC004777

219. 2018 Watts, A. B., B. Tozer, M. C. Daly, J. Smith, "A comparative study of the Parnaíba, Michigan and Congo cratonic basins", In Daly, M. C., Fuck, R. A., Julià, J., Watts, A. B. & Macdonald, D. I. M. (eds), Cratonic Basin Formation: A case study of the Parnaíba basin of Brazil, *Geol. Soc. Lond.* Special Publications, 472, https://doi.org/10.1144/SP472.6

220. 2018 Angrand, P., M. Ford, A. B. Watts*, "*Lateral variations in foreland flexure of a rifted continental margin: the Aquitaine Basin (SW France)", *Tectonics*, https://doi.org/10.1002/2017TC004670

221. 2018 Daly, M. C., B. Tozer, A. B. Watts, *"*Cratonic basins and the Wilson Cycle: a perspective from the Parnaíba Basin Brazil". In Wilson, R. W., Houseman, G. A., McCaffrey, K. J. W., Dore, A. G. & Buiter, S. J. H. (eds), Fifty years of the Wilson Cycle Concept in Plate Tectonics, *Geol. Soc. Lond.* Special Publications, 470, https://doi.org/10.1144/SP470.13

222. 2018 Morgan, R. L. and A. B. Watts, "Seismic and gravity constraints on flexural models for the origin of seaward dipping reflectors", *Geophys. J. Int.*, 214, 2073-2083, https://doi.org/10.1093/gji/ggy243

223. 2018 Watts, A. B., "The use of object-oriented and process-oriented methods for gravity modelling of sedimentary basins", *Geophys. J. Int.,* https://doi.org/10.1093/gji/ggy353

224. 2018 Daly, M. C., Fuck, R.A., Julia, J., Macdonald, D. I. M., Watts, A. B., 2018. "Cratonic basin formation: a case study of the Parnaíba Basin of Brazil", *Geol. Soc. London Special Publications,* 472**,** 1-15, https://doi.org/10.1144/SP472.20

225. 2018 Metz, D., A. B. Watts, I. Grevemeyer, M. Rodgers, "Tracking submarine volcanic activity at Monowai: Constraints from long-range hydroacoustic measurements", *J. Geophys. Res.* 123, 7877-7895, https://doi.org/10.1029/2018JN015888

226. 2018 Richards, F. D., L. M. Kalnins, A. B. Watts, B. E. Cohen, R. J. Beaman, 2018. "The Morphology of the Tasmantid Seamounts: Interactions between

Tectonic Inheritance and Magmatic Evolution", *Geochemistry Geophysics Geosystems,* 19, https://doi.org/10.1029/2018GC007821

227. 2019 Paxman, G. J. G., S. R. S. Jamieson, F. Ferraccioli, M. J. Bentley, N. Ross, A. B. Watts, G. Leitchenkov, E. Armadillo, D. Young, "The role of lithospheric flexure in the landscape evolution of the Wilkes Subglacial Basin and Transantarctic Mountains of East Antarctica". *J. Geophys. Res*. https://doi.org/10.1029/2018JF004705

228. 2019 Watts, A. B., "MARTIN HAROLD PHILLIPS BOTT 12 July 1926 – 20 October 2018", *Biog. Mem. Fell. Roy. Soc. London.* https://doi.org/10.1098/rsbm.2019.0009

229. 2019 Metz, D., A. B. Watts, I. Grevemeyer, R. Werner, H. Huusmann, "Updated seafloor topography and T phase seismicity at Monowai, northern Kermadec Arc". *New Zealand Journal of Geology and Geophysics*. https://doi.org/10.1080/00288306.2019.1651747

230. 2019 Watts, A. B., "Science, Seamounts and Society". *Geoscientist,* 29 (7), 10-16, https://doi.org/10.1144/geosci2019-039

231. 2020 Daly, M. C., P. Green, A. B. Watts, O. Davies, F. Chibesakunda, R. Walker, "Tectonics and Landscape of the Central African Plateau and their implications for a propagating Southwestern Rift in Africa". *Geochemistry Geophysics Geosystems,* 21, https://doi.org/10.1029/2019GC008746

232. 2020 Ali, M. Y., A. B. Watts, M. P. Searle, B. Keats, S. Pilia, T. Ambrose, "Geophysical imaging of ophiolite structure in the United Arab Emirates" *Nature Communications*, https://doi.org/10.1038/s41467-020-16521-0

233. 2020 Bellas, A., S. J. Zhong, A. B. Watts, "Constraints on the rheology of the lithosphere from flexure of the Pacific Plate at the Hawaiian Islands". *Geochemistry, Geophysics, Geosystems*, 21, e2019GC008819. https://doi.org/10.1029/2019GC008819

234. 2020 Watts, A. B., B. Tozer, H. Harper, B. Boston, D. J. Shillington, R. Dunn, "Evaluation of shipboard and satellite-derived bathymetry and gravity data over seamounts in the northwest Pacific Ocean", *J. Geophys. Res.,*125, e2020JB020396. https://doi.org/ 10.1029/2020JB020396

235. 2021 Watts, A. B., I. Grevemeyer, D. J. Shillington, R. Dunn, B. Boston, L. Gómez de la Peña, "Seismic structure, Gravity anomalies and Flexure along the Emperor Seamount chain", *J. Geophys. Res.,* 126, e2020JB021109 https://doi.org/10.1029/2020JB021109

236. 2021 Pilia, S., M. Y. Ali, M. P. Searle, A. B. Watts, C. Lü and D. A. Thompson, "Crustal structure of the UAE-Oman mountain range and Arabian rifted passive margin: new constraints from active and passive seismic methods*", J. Geophys. Res*., https://doi.org/10.1029/2020JB021374

237. 2021 Pilia, S., A. Kaviani, M. P. Searle, P. Arroucau, M. Y. Ali, A. B. Watts, "Crustal and mantle deformation inherited from obduction of the Semail ophiolite (Oman) and continental collision (Zagros)", *Tectonics*, https://doi.org/10.1029/2020tc006644

238. 2021 Watts, A. B., "Science, seamounts and society", *Ocean Challenge*, 25, p28-35.

239. 2021 Ali, M. Y. and A. B. Watts, “Crustal structure of the Nogal Basin, Northern Somalia”, *Journal African Earth Sciences,* https://doi.org/10.1016/j.jafrearsci.2021.104385

240. 2021 Watts, A. B., “Reflections on a career in marine geoscience”, *Perspectives of Earth and Space Scientists,* 2*,* e2021CN000144 https://doi.org/10.1029/2021CN000144

241. 2022 Bellas, A., S. J. Zhong, A. B. Watts, “Reconciling lithospheric rheology between laboratory experiments, field observations and different tectonic tectonic settings”, *Geophys. J. Int.*, 228, 857-875, https://doi.org/10.1093/gji/ggab382

242. 2022 Chong X., R. Dunn, A. B. Watts, D. Shillington, I. Grevemeyer, L. Gómez de la Peña and B. Boston, “A seismic tomography, gravity, and flexure study of the crust and upper mantle structure of the Emperor Seamounts at Jimmu guyot”, *J. Geophys. Res.* https://doi.org/10.1029/2021JB023241

243. 2022 Wessel, P., A. B. Watts, S.-S. Kim, and D. T. Sandwell, “Models for the evolution of seamounts”, *Geophys. J. Int.*, *231*, 1898-1916, https://doi.org/10.1093/gji/ggac285

244. 2023 Gu Z., X. Zhai, A. B. Watts, G. Liu, H. Jiang, and W. Mo, “Formation and evolution of an Early Cambrian foreland basin in the northwest Yangtze Block, South China”, *J. Geol. Soc. London*. https://doi.org/10.1144/jgs2022-127

245. 2023 Ismaiel, M., M. Y. Ali, A. B. Watts, B. Barkat, “Spatial variations of effective elastic thickness of eastern Arabia: Implications for lithospheric weakening in the Oman-UAE mountain belt”, *Tectonophysics, 863,* https://doi.org/10.1016/j.tecto.2023.229995

246. 2023 Cilli, P., A. B. Watts, B. Boston and D. J. Shillington, “Re-processing of legacy seismic reflection profile data and its implications for plate flexure in the vicinity of the Hawaiian Islands”, *J. Geophys. Res.*, *128*, https://doi.org/10.1029/2023JB026577

247. 2023 Watts, A. B. "*Isostasy and Flexure of the Lithosphere*", 2nd Edition, Cambridge University Press. 583 pp.

248. 2023 MacGregor, B. R. Dunn, A. B. Watts, C. Xu and D. J. Shillington, “A seismic tomography, gravity and flexure study of the crust and upper mantle structure of the Hawaiian Ridge: 1”, *J. Geophys. Res., 128,* https://doi.org/10.1029/2023JB027218

249. 2023 Mohammed, J, M. Y. Ali, M. Ismaiel and A. B. Watts, “Subsidence and Uplift History of the UAE and the Western Flank of the UAE-Oman Mountain Range”, *Tectonics, 42,* https://doi.org/10.1029/2023TC007998

250. 2024 Dunn, R. A., A. B. Watts, C. Xu and D. J. Shillington, “A seismic tomography, gravity and flexure study of the crust and upper mantle structure across the Hawaiian Ridge: 2. Ka’ena”, *J. Geophys. Res., 129,* https://doi.org/10.1029/2023JB028118

251. 2024 Searle, M.P., R. K. Shail, J. M. Pownall, and C. Jurkowski, “The Permian Cornubian Batholith, SW England; Part 1: Field, structural and petrological constraints”, *Geol. Soc. Amer. Bull.* https://doi.org/10.1130/B37457.1

252. 2024 Watts, A. B., C. Xu, M. P. Searle, C. Jurkowski and R. K. Shail, "The Permian Cornubian Batholith, SW England; Part 2: Gravity anomalies, structure, and state of isostasy", *Geol. Soc. Amer. Bull.* https://doi.org/10.1130/B37459.1

253. 2025 Watts, A. B., P. Wessel, C. Xu, "The effective elastic thickness along the Emperor Seamount chain and its tectonic implications", *Geophys. J. Int.* https://doi.org/10.1093/gji/ggae372/7826795

254. 2025 Yang, A., A. B. Watts, S. J. Zhong, "The relationship between gravity anomalies and topography in the Pacific Ocean and its implications for flexural isostasy, mantle viscosity and dynamics", *Earth Planet. Sci Letters*. https://doi.org/10.1016/j.epsl.2025.119246

255. 2025 Ali, M., M. Ismaiel, A. Abdelmaksoud, S. Pilia, A. B. Watts, M. P. Searle, "Geophysical Investigations of the Fujairah Basin, East Coast of United Arab Emirates: Insights into Tectonic Evolution", *J. Geophys. Res.* http://doi.org/10.1029/2024JB030345

256. 2025 Watts, A.B., I. Grevemeyer, "Legacy seismic and gravity data in the vicinity of Great Meteor Seamount and its tectonic implications", *J. Geophys. Res.* http://doi.org/10.1029/2024JB030016

257. 2025 Boston, B., D. J. Shillington, A. B. Watts, P. Cilli, R. Dunn, G. Ito, P. Wessel, and U. ten_Brink, "Crustal Structure Surrounding the Hawaiian Islands: Volcanic Island Construction Across Scarred Oceanic Crust", *J. Geophys. Res. 130*, https://doi.org/10.1029/2024JB030377

258. 2025 Douglas, D., G. Ito, B. Boston, R. Dunn, J. Naliboff, P. Wessel, A. B. Watts, D. Shillington and P. Cilli, "Magma-assisted flexure of Hawaiian lithosphere inferred from three-dimensional models of lithospheric flexure and active source seismic data", *J. Geophys. Res. 130*, https://doi.org/10.1029/ 2024JB030376

259. 2025 Watts, A. B., C. Xu, P. Wessel, D. J. Shillington, B. Boston and R. Dunn, "Seismic and gravity constraints on plate flexure and mantle rheology along the whole Hawaiian-Emperor seamount chain", *Nature Comms. 16*, https://doi.org/10.1038/s41467-025-65442-3

260. 2026 Xu, C. and Watts, A.B., "Gravity and seismic constraints on plate flexure and mantle rheology along the whole Louisville Ridge", *Earth Planet. Sci. Lettrs.*, 690, https://doi.org/10.1016/j.epsl.2026.120171

261. 2026 Watts, A. B., "Origin of river terraces by isostatic unloading of the lithosphere", *J. Geol. Soc. London,* https://doi.org/10.1144/jgs2026-026

262. 2026 Wang, Z. and Watts, A. B., "Global seamount detection using machine learning", *Earth Planet. Sci. Lettrs.* 696*,* https://doi.org/10.1016/j.epsl.2026.120368

Submitted

263. 2026 ten Brink, U., S. Heller, C. Mandeville, B. Boston, D. Foster, R. A. Dunn, A. B. Watts, and D. J. Shillington, "Sub-crustal reflectors and their significance for the magmatic history of the Hawaiian ridge", *Science Advances*.

264. 2026 Xu, C., A. B. Watts, D. Bassett, I. Grevemeyer and R. A. Dunn, "Subducted Louisville Ridge seamounts and sediment- and fluid-rich heterogeneity in the Tonga-Kermadec forearc", *Science Advances*.

In preparation

265. 2026 Engen, O., A. B. Watts, J. I. Faleide, "Arctic margin gravity highs capture the flexural response of the lithosphere to glacial sediment loading"