

Dr Alastair G.C. Graham

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EDUCATION AND CAREER HISTORY

Associate Professor	College of Marine Science, University of South Florida	2019 –
Senior Lecturer	University of Exeter	2018 – 2019
Lecturer in Physical Geography	University of Exeter	2013 – 2018
Marine Geomorphologist	Ice Sheets programme, British Antarctic Survey (including 6-months funding on NERC-funded <i>ChEsSO</i> consortium grant)	2009 – 2013
Marine Geophysicist	QWAD (Quaternary West Antarctic Deglaciation) programme, British Antarctic Survey, Cambridge (including 3-months funding on AFI project 4/17)	2007 – 2009
Ph.D. Marine Geophysics	Imperial College London/British Geological Survey BGS-UCAC funded studentship Title: <i>Reconstructing Pleistocene glacial environments in the central North Sea using 3D seismic and borehole data</i> Advisors: Dr. Lidia Lonergan, Dr. Martyn Stoker	2003 – 2007
Marie Curie Ph.D. Fellow	Dept. of Marine Geosciences, University of Bergen, Norway Mentor: Prof. Hans Petter Sejrup EU-funded SNEHILO (<i>Sedimentary processes and natural changes in European high latitude oceans</i>) Training programme; 3-month secondment	Summer 2004
B.Sc. Hons.	Geography, Royal Holloway, University of London	2000 – 2003

RESEARCH GRANTS AND AWARDS

Active and sustained record of obtaining external research funding, as both PI and Co-I from national funding bodies and as part of larger international collaborative research programmes.

02/2020:	German Research Foundation, DFG Ship Time Proposal for RV <i>Polarstern</i> : “ <i>IslandImpact: Understanding the regional impact of islands (South Georgia) on Southern Ocean biogeochemistry and ecosystem function</i> ”, with PI Sabine Kasten (AWI Bremerhaven). Funded cruise proposal which will allow cruise participation for USF group members and ongoing international collaboration in 2022.
10/2018 – 09/2023	NSFPLR-NERC: International Thwaites Glacier Collaboration, NE/S006206/1 (£913,000 UK split award , USD\$121,000 to Exeter), “ <i>THOR: Thwaites Offshore Research</i> ”; One of four Principal Investigators, with Wellner (U. Houston), Larter (BAS) and Simkins (U. Virginia). USD\$2 million total award between US/UK partners. <u>Now on sub-contract to USF.</u>
10/2014 – 10/2016	NERC UK-IODP site survey grant NE/J006548/1 (£280,880), “ <i>Depositional patterns and records in sediment drifts off the Antarctic Peninsula and West Antarctica</i> ”; with Larter (BAS), Channell (Florida) & Hodell (Cambridge); Co-Investigator.
12/2012 – 12/2014	NERC New Investigator Award NE/K000527/1 (£99,985), “ <i>Testing the extent and timing of past glaciations on the largest sub-Antarctic island, South Georgia</i> ”; Principal Investigator.

- 02/2015:** NERC NIGL Isotope Support Award (£55,750 – actual and in kind), “*Determining if changes in the position of the Southern Westerly Wind belt impact the South Georgia marine ecosystem*”; Co-Investigator.
- 02/2015** NERC NIGL Isotope Support Award (£44,000 – actual and in kind), “*Reconstructing Holocene glacier discharge from the South Orkney Ice cap using $\delta^{18}\text{O}_{\text{diatom}}$ isotopes*”; Co-Investigator.
- 10/2012 – 10/2015** NERC Algorithm PhD Studentship grant; Lead Supervisor to William Dickens (£9,370 + bursary to student of £45,000) “*Reconstructing the glacial and climate history of the South Orkney Islands, NE Antarctic Peninsula*”. Project in collaboration with Prof. J. Dowdeswell (Scott Polar Research Institute), and Dr. G. Kuhn (Alfred-Wegener Institute for Polar and Marine Research, Bremerhaven, Germany).
- 10/2011 – 10/2014** Project Partner on NERC New Investigator Award NE/J004766/1, “*The formation of Mega Scale Glacial Lineations: insights into the mechanisms of ice stream flow*”; led by Dr. M. Spagnolo (University of Aberdeen).

FIELDWORK EXPERIENCE & FORTHCOMING WORK

Extensive experience in marine science and survey work at sea; participation in 9 major expeditions to the polar seas – total of 11.4 career months working at sea in the Antarctic.

- 2022 NBP22-??, TBD.** Anticipated group participation in ITGC funded TARSAN project, to Thwaites Glacier. Team will focus on obtaining new high-resolution geophysics under floating ice shelves using a Kongsberg Hugin AUV.
- 2020 NBP20-02, Jan-Apr.** Geophysicist and PI with ‘THOR’ project: second season surveying proximal sea floor areas in front of Thwaites Glacier for centennial to millennial history and forcing. Team leader for Night shift. 65-day cruise.
- 2019 NBP19-02, Jan-March:** Geophysicist/geologist and PI with ‘THOR’ project: survey of Thwaites Glacier proximal sea floor and coring for glacier history; particular role working in collaboration with TARSAN (Karen Heywood and Anna Wahlin) on high-resolution geophysics obtained by a Kongsberg Hugin AUV, to examine processes of past marine ice sheet retreat. 61-day cruise.
- 2015 JR298, Jan-Mar:** Geophysicist aboard RRS *James Clark Ross*, to the Antarctic Peninsula/Bellingshausen Sea: 30-day multi-channel seismic survey and coring cruise, funded by NERC UK-IODP.
- 2013 ANT29-3, Mar-Apr:** Geophysicist aboard RV *Polarstern*. 21-day cruise to South Georgia investigating glacial history, and mapping in order to establish the presence of methane seeps on the South Sandwich forearc.
- 2012 JR257, Mar-Apr:** Marine Geophysicist aboard RRS *James Clark Ross*, to South Georgia and the Scotia Sea, UK: 30-day geological cruise, including sediment coring for ice-cap and climate history of the sub-Antarctic.
- 2011 JRtri006, August:** Marine Geophysicist aboard RRS *James Clark Ross*, to the Porcupine Basin, UK: 10 day technical trials cruise for acceptance of new Kongsberg EM122 multibeam echo sounder.
- 2011 JR244, Jan-March:** Marine Geophysicist and Geologist aboard RRS *James Clark Ross*: 60-day geoscience cruise to the Weddell Sea margin, studying glacial, climate and oceanographic history.
- 2010 JC42, Jan-Feb:** Marine Geophysicist aboard RRS *James Cook*: 31-day interdisciplinary cruise funded by ChEsSO consortium grant to study the geology, biology and chemistry of hydrothermal vents on the East Scotia Ridge. GIS/geophysics/dive-plan and mission support for the NERC *Isis* ROV.
- 2009 JR224, Jan-Feb:** Marine Geophysicist aboard RRS *James Clark Ross*: 28-day NERC ChEsSO consortium-funded cruise to map the East Scotia Ridge, and search for hydrothermal vents.
- 2008 JR179, Feb-April:** Marine Geophysicist and Geologist aboard RRS *James Clark Ross*: 51-day geological and biological cruise to Pine Island Bay, the Amundsen Sea shelf, and West Antarctic continental margin.

GEOPHYSICAL, GEOLOGICAL AND TECHNICAL COMPUTING SKILLS

In-depth knowledge of specialist, industry-standard geoscientific software, including: GLOBE Claritas, SMT Kingdom Suite, Landmark Seisworks, ArcGIS, GMT, MB-system, CARIS Hips and Sips, ProMax, Neptune

software. Upcoming training in Fledermaus and QPS acquisition and processing software. Wide range of technical skills including ship-based geological and geophysical data collection and processing, laboratory techniques, sedimentological and physical properties analyses (Geotek multi-sensor core logger, interpretation of XRF line-scan data), field mapping abilities, as well as knowledge of geochronological and geochemical techniques (radiocarbon dating, chemostratigraphy). Experience in dive planning and implementation for missions of Remotely Operated Vehicles (ROVs), and calibration of multibeam echosounder equipment. Experience planning missions, handling and processing geophysical data from Kongsberg *Hugin* Autonomous Underwater Vehicles (AUV) and NERC's *Autosub*.

Formal field training:

- 2008** British Geological Survey Field training course – Glacial systems, Iceland (14 days)
- 2006** British Geological Survey Field training course – Upland Quaternary Mapping, Cairngorms (14 days)
- 2005** NERC training course in Micromorphology of Glacial Sediments (5 days)

AWARDS, ACADEMIC RESPONSIBILITIES AND COMMUNITY SERVICE

- BAS Contribution Award (2010), Recognition Award (2011)
- Winner of **The Laws Prize** (2013); to outstanding young scientists with proven aptitude for research
- University of Exeter Above and Beyond, Silver **Award for Collaboration** (2015)
- **Invited speaker** at European Geosciences Union Meeting 2011
- **Invited speaker and popular talks** at University of Sheffield (2007), Imperial College London (2008), BAS Polar Science for Planet Earth Launch (2009), University of the Third Age (2011), Stamford Geological Society (2010), Durham University – Subglacial Landforms Workshop (2015), Royal Geographical Society Southwest (2018)
- **Oral and poster conference presentations (first author):** IAS Glacial Sedimentary Processes and Products, Aberystwyth (2005), Seismic Geomorphology Houston (2006), International Geological Congress, Oslo (2008), SCAR-PAIS conference (2009, 2017), EGU (2011, 2014), ISAES (2007, 2011, 2015), WAIS workshop (2011), FRISP (2012).
- **Contributing author to numerous conference and workshop abstracts**
- **Lead session convener** at European Geosciences Union Meeting (2014); Session CL2.6/GM9.5 - *Glacial, climatic and geological evolution of sub-Antarctic South Georgia and the Southern Ocean* (co-organized), with M. Melles (Cologne) and D. Hodgson (BAS).
- **Lead session convener** at American Geophysical Union (AGU) Fall Meeting 2020; Proposed session on *Holocene changes in Antarctic ice-sheet behaviour*, with J. Johnson (BAS), K. Nichol (Tulane), R. Clark (Houston).
- **Co-convener** of the 2016 William Smith Meeting, Geological Society of London, on “*Glaciated Margins: the sedimentary and geophysical archive*”.
- **Co-convener** of AGU 2019 session C53B - *Sub-Ice-Sheet and Sub-Ice-Shelf Environments: Bridging the Gap Between Modern Observations and Geologic Records II Posters*, with R. Venturelli (USF), C. Gustafson (Columbia), M. Siegfried (Colorado).
- **Co-convener** of proposed AGU 2020 session - *Sub-Ice-Sheet and Sub-Ice-Shelf Environments: Bridging the Gap Between Modern Observations and Geologic Records II Posters*, with R. Venturelli (USF), C. Gustafson (Columbia), M. Siegfried (Colorado).
- **Co-editor** of Geological Society of London, Special Publication 475: “*Glaciated Margins: the sedimentary and geophysical archive*”, in press, due for release early 2019.
- Scientific Editor (SE) for the *Journal of Glaciology*.
- **International Committee member** for grant round of the NWO Netherlands Polar Programme (2014)
- **Proposal reviewer:** for UK Natural Environment Research Council, standard grants
- **Proposal reviewer:** for Deutsche Forschungsgemeinschaft (DFG - German Research Foundation), standard grants.
- **Scientific Editor (SE)** for *Journal of Glaciology*
- **Reviewer** for journals (at least 1 per month) including: *Nature Communications, Journal Quaternary Science, Quaternary Science Reviews, Journal of Glaciology, G-cubed, Geology, Norwegian Journal of Geology, Journal of Geophysical Research: Earth Surface, The Cryosphere, Marine Geology, P-3, Scottish Journal of Geology, Science Advances*.

ACADEMIC SERVICES

- **Director of Post-doctoral Researchers:** Geography, University of Exeter (2017 – 2019); role

responsible for the welfare, advancement, professional development, and support of post-docs.

- **Geography Equality, Diversity & Inclusivity committee:** Geography, University of Exeter (2017 – 2019); member of staff and student committee dealing with issues of equality and inclusivity in the department.
- **College Equality, Diversity & Inclusivity committee:** Geography, University of Exeter (2017 – 2019); representative for Geography department on college-level strategy and policy making.
- **Athena SWAN core group:** Geography, University of Exeter (2017 – 2019); core group member working towards achieving Athena SWAN Accreditation for gender equality. Silver accreditation achieved in 2017.
- **Departmental Research Committee:** Geography, University of Exeter (2017 – 2019); part of the strategic and directional decision-making group for the Geography department.
- **Departmental seminar series organiser:** Geography, University of Exeter (2016 – 2019); arranging and hosting external speaker series.
- **University Open Day representative:** Geography, University of Exeter (2013 – 2019); question-taking, tours, and public talks to prospective undergraduate students.
- **CCoRD – Cryosphere, Coasts, and River Dynamics research group member:** (2018 – 2019); regular attendance and participation in research group meetings and away days.

GRADUATE STUDENT SUPERVISION AND MENTORING

2019-Present	Comm. Member	Tiffany Boisvert (MS, University of South Florida) ' <i>Restoration and out-planting success of coral on a long-term scale</i> '
2018- Present	Lead Advisor	Charlotte Pearson (MSc by Research, University of Exeter; September 2018) ' <i>A pan-Arctic assessment of ice-wedge polygons and their role in the stability of lowland slopes</i> '
2016- 2019	Co-supervisor	Oliver Bartlett (PhD student, University of Exeter) ' <i>Developing novel methods in remote sensing and unmanned aerial vehicle surveying for application in glaciology</i> '
2017	External Examiner	Andrew Newton (PhD student, University of Manchester)
2017	Internal Examiner	Alex Whittle (MSc by Research, University of Exeter)
2017	Lead Advisor	Hamish Morton (Student Internship) ' <i>Detecting 21st C change in South Georgia glaciers, sub-Antarctica, using remote-sensing techniques</i> ' – now studying for MSc in Geographic Information Systems at Edinburgh.
2013-2018	Co-supervisor	Damon Davies (PhD student, Edinburgh University; ' <i>The nature and dynamics of ice stream beds: assessing their role in ice-sheet stability</i> '). Co-supervisor, with Dr. Robert Bingham, Dr. Matteo Spagnolo (University of Aberdeen), and Prof. David Vaughan (BAS) – now working in science policy.
2014-2018	Mentor	Rowan Dejardin (PhD student, U. of Nottingham/BGS Case - advisor) ' <i>Influence of the South Westerlies and the El Nino Southern Oscillation climate system on ocean water masses and changes in freshwater flux into the ocean around South Georgia</i>
2013	Co-supervisor	Ove Meisel (MSc in Marine Geoscience, University of Bremen) ' <i>Environments of deposition on the South Georgia shelf</i> ' - now PhD student at Vrije Universiteit Amsterdam
2012-2016	Lead Advisor	William Dickens (PhD student, Cambridge University/BAS; October 2012-May 2016) ' <i>Reconstructing the Glacial History of the South Orkney shelf, NE Antarctic Peninsula</i> '. Lead supervisor, with Dr. James Smith (BAS), and Prof. Julian Dowdeswell (SPRI-Cambridge).
2011-2015	Co-supervisor	Johann Klages (PhD student, Alfred Wegener Institute for Polar and Marine Research), ' <i>Late Quaternary West Antarctic Ice Sheet Dynamics</i> ', with Dr. Gerhard Kuhn (AWI), Dr. Claus-Dieter Hillenbrand and Dr. James Smith (BAS) - now a PDRA at AWI.

TEACHING QUALIFICATIONS AND EXPERIENCE

- Fellow of the Higher Education Academy (HEA), Awarded 2017 – professional teaching qualification
- Postgraduate Certificate in Academic Practice, University of Exeter, Awarded 2017

2019-Present. **College of Marine Science, University of South Florida**

2019-20

- OCE6934 Paleoceanography seminar (contributed to class discussion and teaching, review of draft graduate student manuscripts and feedback). Fall 2019.

2013-2019. **Department of Geography, University of Exeter**

2018-19

- GEO3238 Exploring the Sea Floor (14 lectures, 3 practicals, 35 students; module design, convenor & all delivery) Term 1
- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; convenor and 50% delivery) Term 1

2017-18

- GEO3238 Exploring the Sea Floor (14 lectures, 3 practicals, 63 students; module design, convenor & all delivery) Term 2
- GEO3231 Dissertation (lead advisor to 11 undergraduate dissertation research projects) Terms 1-3
- GEO2307A Iceland Field Trip (8 day field course, 4 lectures, 32 students, 5 staff; trip leader) Term 2
- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; convenor and 50% delivery) Term 1
- GEO1315 Research Skills for Geographers (3-day 1st year residential, 105 students, 10 staff; trip organiser and field leader) Term 1

2016-17

- GEO3231 Dissertation (lead advisor to 7 undergraduate dissertation research projects) Terms 1-3
- GEO2307A Iceland Field Trip (8 day field course, 32 students, 2 lectures, 5 staff; trip leader) Term 2
- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; convenor and 50% delivery) Term 1
- GEO1315 Research Skills for Geographers (3-day 1st year residential, ~90 students, 10 staff; trip organiser and field leader) Term 1

2015-16

- GEO3231 Dissertation (lead advisor to 7 undergraduate dissertation research projects) Terms 1-3
- GEO2307A Iceland Field Trip (8 day field course, 30 students, 3 lectures) Term 2
- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; convenor and 50% delivery) Term 1
- GEO1315 Research Skills for Geographers (3-day 1st year residential, ~100 students) Term 1

2014-15

- GEO3231 Dissertation (lead advisor to 3 undergraduate dissertation research projects) Terms 1-3
- GEO2307A Iceland Field Trip (7-day field course, 28 students, 2 lectures) Term 2
- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; convenor and 50% delivery) Term 1
- GEO1315 Research Skills for Geographers (3-day 1st year residential, ~100 students) Term 1

2013-14

- GEO2228 Cold Climate Geomorphology (7 lectures, 3 practicals, 1-day field trip; module design, convenor and 50% delivery) Winter Term

- Demonstrable evidence of outstanding teaching quality through sustained positive student feedback, including as leader for 2nd year Iceland Physical Geography fieldtrip (score of 4.7/5.0 in 2016, 5.0/5.0 in 2017). Feedback on a course which I designed and have convened for the last 5 years (GEO2228 Cold Climate Geomorphology) returned student feedback scores of 4.193 in 2013/14, 4.318 in 2014/15, 4.199 in 2015/16, 4.9 in 2016/17, and 4.3 out of 5 in 2017/18.
- Demonstrable leadership in field education. Whilst at Exeter I played a major role in delivering the Geography department's fieldwork activities across modules
- Nomination for 'Most Supportive Staff Member' in Exeter Student Guild Awards three years in a row.

PUBLICATIONS

60 peer-reviewed publications, including 5 in Nature Group journals, 1 in Geology, and 1 in PLOS Biology (Google Scholar as of 20/04/20: 2202 citations, h-index 28, i10-index 40). 2+ in prep. Editor for one book. Students marked with *.

60. Hogan KH, Larter RD, **Graham AGC**, Arthern R, Kirkham JD, Minzoni R, Jordan TA, Clark R, and 10 others. Revealing the former bed of Thwaites Glacier using sea-floor bathymetry. *The Cryosphere*, in revision.
59. Jordan TA, Porter D, Tinto K, Millan R, Muto A, Hogan K, Larter RD, **Graham AGC**, Paden JD. New gravity-derived bathymetry for the Thwaites, Crosson and Dotson ice shelves revealing two ice shelf populations. *The Cryosphere*, in revision.
58. Linse K, Copley KT, Connelly DP, Larter RD, Pearce DA, Polunin NVC, **Graham AGC** and others (2019) The fauna of the upper bathyal hydrothermal vents of the Kemp Caldera (South Sandwich Arc, Antarctica). *Royal Society Open Science*, 6(11),1-26.
57. Le Heron DP, Hogan KA, Phillips ER, Huuse M, Busfield ME, **Graham AGC** (2019). An introduction to glaciated margins: the sedimentary and geophysical archive. In Le Heron *et al.* (Eds.) Glaciated Margins: the sedimentary and geophysical archive. Geological Society, London, Special Publications 475 (1), 1-8.
56. Larter RD, Hogan KH, Hillenbrand C-D, Smith JA, Batchelor CL, Cartigny M, Tate AJ, Kirkham JD, Roseby ZA, Kuhn G, **Graham AGC**, Dowdeswell JA (2019). Subglacial hydrological control on flow of an Antarctic Peninsula paleo-ice stream. *The Cryosphere*,
55. *Dickens WA, Kuhn G, Leng MJ, **Graham AGC**, Dowdeswell JA, Sloane H, Meredith MP, Hillenbrand C-D, Smith JA (2019). Enhanced glacial discharge in the Weddell Sea sector of Antarctica during the past ~200 years associated with strengthened circumpolar winds. *Scientific Reports*, 9(1), 1-11.
54. Smith JA, **Graham AGC**, Post AL, Hillenbrand CD, Powell R, Bart P, (2019). The marine geological imprint of Antarctic ice shelves. *Nature Communications*, 10, 5635.
53. Jeofry H, Ross, N, Le Brocq A, **Graham AGC**, Li J, Gogenini P, Morlighem M, Jordan T, Siegert MJ. Hard rock landforms generate 130 km ice shelf channels through water focusing in basal corrugations (2019). *Nature Communications*, 9, 4576.
52. Hodgson DA, Hogan K, Smith J, Smith JA, Hillenbrand C-D, **Graham AGC**, Fretwell PT, Allen C, Peck V, Arndt J-E, Dorschel B, Hubscher C, Smith A, Larter RD (2018). Deglaciation and future stability of the Coats Land ice margin, Antarctica. *The Cryosphere*, 12, 2383–2399
51. *Davies D, Bingham RG, King EC, Smith AM, Brisbourne AM, Spagnolo M, **Graham AGC**, Hogg AE, Vaughan DG (2018). How dynamic are ice-stream beds?. *Cryosphere*, 12(5), 1615–1628.
50. Bingham RG, Vaughan DG, King EC, Davies D, Cornford SL, Smith AM, Arthern RJ, Brisbourne AM, De Rydt J, **Graham AGC**, et al (2017). Diverse landscapes beneath Pine Island Glacier influence ice flow. *Nature Communications*, 8(1).
49. *Davies D, Bingham RG, **Graham AGC**, Spagnolo M, Dutrieux P, Vaughan DG, Jenkins A, Nitsche FO (2017). High-resolution sub-ice-shelf seafloor records of 20th-century ungrounding and retreat of Pine Island Glacier, West Antarctica. *Journal of Geophysical Research: Earth Surface* Full text.
48. *Klages JP, Kuhn G, Hillenbrand CD, Smith JA, **Graham AGC**, Nitsche FO, Frederichs T, Jernas PE, Gohl K, Wacker L, et al (2017). Limited grounding-line advance onto the West Antarctic

- continental shelf in the easternmost Amundsen Sea Embayment during the last glacial period. *PLoS ONE*, 12(7).
47. **Graham AGC**, Kuhn G, Meisel O, Hillenbrand C-D, Hodgson DA, Ehrmann W, Wacker L, Wintersteller P, dos Santos Ferreira C, Römer M, et al (2017). Major advance of South Georgia glaciers during the Antarctic Cold Reversal following extensive sub-Antarctic glaciation. *Nature Communications*, 8, 14798.
 46. Spagnolo M, Bartholomaeus TC, Clark CD, Stokes CR, Atkinson N, Dowdeswell JA, Ely JC, **Graham AGC**, Hogan KA, King EC, et al (2017). The periodic topography of ice stream beds: Insights from the Fourier spectra of mega-scale glacial lineations. *Journal of Geophysical Research: Earth Surface*, 122(7), 1355-1373.
 45. *Klages JP, Kuhn G, Hillenbrand C-D, **Graham AGC**, Smith JA, Larter RD, Gohl K (2016). A glacial landform assemblage from an inter-ice stream setting in the eastern Amundsen Sea Embayment, West Antarctica. *Geological Society, London, Memoirs*, 46(1), 349-352.
 44. Nitsche FO, Larter RD, Gohl K, **Graham AGC**, Kuhn G (2016). Bedrock channels in Pine Island Bay, West Antarctica. *Geological Society, London, Memoirs*, 46(1), 217-218.
 43. Nitsche FO, Larter RD, Gohl K, **Graham AGC**, Kuhn G (2016). Crag-and-tail features on the Amundsen Sea continental shelf, West Antarctica. *Geological Society, London, Memoirs*, 46(1), 199-200.
 42. **Graham AGC**, Hogan KA (2016). Crescentic scours on palaeo-ice stream beds. *Geological Society, London, Memoirs*, 46(1), 221-222.
 41. *Dickens WA, **Graham AGC**, Smith JA, Dowdeswell JA (2016). Large, buried glacial moraines revealed by TOPAS sub-bottom profiling, South Orkney Islands, South Atlantic Ocean. *Geological Society, London, Memoirs*, 46(1), 251-252.
 40. **Graham AGC**, Jakobsson M, Nitsche FO, Larter RD, Anderson JB, Hillenbrand C-D, Gohl K, Klages J, Smith JA, Jenkins A, et al (2016). Submarine glacial-landform distribution across the West Antarctic margin, from. grounding line to slope: the Pine Island-Thwaites ice stream system. *Geological Society, London, Memoirs*, 46(1), 290-296.
 39. **Graham AGC**, Nitsche FO, Larter RD, Gohl K (2016). Submarine landform assemblage produced beneath the Dotson–Getz palaeo-ice stream, West Antarctica. *Geological Society, London, Memoirs*, 46(1), 345-348.
 38. **Graham AGC**, Hodgson DA (2016). Terminal moraines in the fjord basins of sub-Antarctic South Georgia. *Geological Society, London, Memoirs*, 46(1), 67-68.
 37. *Klages JP, Kuhn G, **Graham AGC**, Hillenbrand C-D, Smith JA, Nitsche FO, Larter RD, Gohl K (2015). Palaeo-ice stream pathways and retreat style in the easternmost Amundsen Sea Embayment, West Antarctica, revealed by combined multibeam bathymetric and seismic data. *Geomorphology*, 245, 207-222.
 36. Bentley MJ, O Cofaigh C, Anderson JB, Conway H, Davies B, **Graham AGC**, Hillenbrand CD, Hodgson DA, Jamieson SSR, Larter RD, et al (2014). A community-based geological reconstruction of Antarctic Ice Sheet deglaciation since the Last Glacial Maximum. *Quaternary Science Reviews*, 100, 1-9.
 35. *Dickens WA, **Graham AGC**, Smith JA, Dowdeswell JA, Larter RD, Hillenbrand CD, Trathan PN, Erik Arndt J, Kuhn G (2014). A new bathymetric compilation for the South Orkney Islands region, Antarctic Peninsula (49°-39°W to 64°-59°S): Insights into the glacial development of the continental shelf. *Geochemistry, Geophysics, Geosystems*, 15(6), 2494-2514.
 34. Römer M, Torres M, Kasten S, Kuhn G, **Graham AGC**, Mau S, Little CTS, Linse K, Pape T, Geprägs P, et al (2014). First evidence of widespread active methane seepage in the Southern Ocean, off the sub-Antarctic island of South Georgia. *Earth and Planetary Science Letters*, 403(0), 166-177.
 33. Hodgson DA*, **Graham AGC***, Griffiths HJ, Roberts SJ, Cofaigh CÓ, Bentley MJ, Evans DJA (2014). Glacial history of sub-Antarctic South Georgia based on the submarine geomorphology of its fjords. *Quaternary Science Reviews*, 89, 129-147. *- joint lead author

32. Gales JA, Leat PT, Larter RD, Kuhn G, Hillenbrand C-D, **Graham AGC**, Mitchell NC, Tate AJ, Buys GB, Jokat W, et al (2014). Large-scale submarine landslides, channel and gully systems on the southern Weddell Sea margin, Antarctica. *Marine Geology*, 348(0), 73-87.
31. Smith JA, Hillenbrand C, Kuhn G, Klages JP, **Graham AGC**, Larter RD, Ehrmann W, Moreton SG, Wiers S, Frederichs T, et al (2014). New constraints on the timing of West Antarctic Ice Sheet retreat in the eastern Amundsen Sea since the Last Glacial Maximum. *Global and Planetary Change*, 122(0), 224-237.
30. Larter RD, Anderson JB, **Graham AGC**, Gohl K, Hillenbrand CD, Jakobsson M, Johnson JS, Kuhn G, Nitsche FO, Smith JA, et al (2014). Reconstruction of changes in the Amundsen Sea and Bellingshausen Sea sector of the West Antarctic Ice Sheet since the Last Glacial Maximum. *Quaternary Science Reviews*, 100, 55-86.
29. Hillenbrand CD, Bentley MJ, Stollendorf TD, Hein AS, Kuhn G, **Graham AGC**, Fogwill CJ, Kristoffersen Y, Smith JA, Anderson JB, et al (2014). Reconstruction of changes in the Weddell Sea sector of the Antarctic Ice Sheet since the Last Glacial Maximum. *Quaternary Science Reviews*, 100, 111-136.
28. *Klages JP, Kuhn G, Hillenbrand CD, **Graham AGC**, Smith JA, Larter RD, Gohl K, Wacker L (2014). Retreat of the West Antarctic Ice Sheet from the western Amundsen Sea shelf at a pre- or early LGM stage. *Quaternary Science Reviews*, 91, 1-15.
27. Spagnolo M, Clark CD, Ely JC, Stokes CR, Anderson JB, Andreassen K, **Graham AGC**, King EC (2014). Size, shape and spatial arrangement of mega-scale glacial lineations from a large and diverse dataset. *Earth Surface Processes and Landforms*, 39(11), 1432-1448.
26. Hodgson DA*, **Graham AGC***, Roberts SJ, Bentley MJ, Cofaigh CO, Verleyen E, Vyverman W, Jomelli V, Favier V, Brunstein D, et al (2014). Terrestrial and submarine evidence for the extent and timing of the Last Glacial Maximum and the onset of deglaciation on the maritime-Antarctic and sub-Antarctic islands. *Quaternary Science Reviews*, 100, 137-158.*- joint lead author
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