Matt D. Tomkins [he/him]

Arthur Lewis Building 1.030 CONTACT Office phone: Upon request

E-mail: matthew.tomkins@manchester.ac.uk **INFORMATION** Department of Geography

School of Environment, Education and Development Website: https://www.mattdtomkins.com/ The University of Manchester

Senior Tutor / Lecturer in GIS **ACADEMIC**

2020 - present Department of Geography **POSITIONS**

School of Environment, Education and Development The University of Manchester

> **Research Associate in GIS** June 2020 - August 2020

Department of Geography & Environment

School of Geosciences University of Aberdeen

Mentor: Prof. Matteo Spagnolo

Lecturer in Physical Geography 2019 - 2020

Department of Geography

School of Environment, Education and Development

The University of Manchester

EDUCATION Ph.D in Physical Geography 2019

The University of Manchester

Thesis: Glacial erosion and mountain denudation over the last glacial cycle: Case studies from the NE Atlantic

2016

2015

Supervisors: Dr. Jason M. Dortch, Prof. Philip D. Hughes, Dr. Jonny J. Huck

MSc (by research) in Environmental Science (Distinction)

Lancaster University

Dissertation: Tracking retreat processes at the Falljökull glacier, Iceland

Supervisors: Prof. Mike R. James, Dr. Peter Wynn

BSc (Hons) in Geography (1st class)

The University of Manchester

Dissertation: Schmidt Hammer exposure dating (SHED): Establishment and implications for the retreat of the last

British Ice Sheet

Supervisor: Prof. Jamie Woodward

PEER-REVIEWED [10] Barr, I.D., Spagnolo, M., Rea, B.R., Bingham, R.G., Oien, R.P., Adamson, K., Ely, J.C., Mullan, D.J., Pellitero, **ARTICLES** R., Tomkins, M.D. (2022) At least 60 million years of glaciation in the Transantarctic Mountains. Nature

Communications, 13, https://doi.org/10.1038/s41467-022-33310-z

[9] Dortch, J.M., Tomkins, M.D., Saha, S., Murari, M.K., Schoenbohm, L.M., Curl, D. (2022). A tool for the ages: The Probabilistic Cosmogenic Age Analysis Tool (P-CAAT). Quaternary Geochronology, 71, https://doi.org/10.1016/j.quageo.2022.101323.

[8] Tomkins, M.D., Dortch, J.M., Hughes, P.D., Huck, J.J., Pallàs, R., Rodés, Á., Allard, J.L., Stimson, A.G., Bourlès, D., Rinterknecht, V., Jomelli, V., Rodríguez-Rodríguez, L., Copons, R., Barr, I.D., Darvill, C.M., Bishop, T. (2021) Moraine crest or slope: An analysis of the effects of boulder position on cosmogenic exposure age. Earth and Planetary Science Letters, 570, https://doi.org/10.1016/j.epsl.2021.117092

[7] Hughes, P.D., Tomkins, M.D., Stimson, A.G. (2019) Glaciation of the English Lake District during the Late-glacial: a new analysis using ¹⁰Be and Schmidt hammer exposure dating. *Northwest Geography*, 19, 8-20.

- [6] Barr, I.D., Ely, J.C., Spagnolo, M., Evans, I.S., **Tomkins, M.D.** (2019). The dynamics of mountain erosion: cirque growth slows as landscapes age, *Earth Surface Processes and Landforms*, 44, 2628–2637, https://doi.org/10.1002/esp.4688.
- [5] Matthews, J.A., Winkler, S., Wilson, P., **Tomkins, M.D.,** Dortch, J.M., Mourne, R.W., Hill, J.L., Owen, G., Vater, A.E. (2018). Small rock-slope failures conditioned by Holocene permafrost degradation: a new approach and conceptual model based on Schmidt-hammer exposure-age dating, Jotunheimen, southern Norway. *Boreas*, 47(4), 144-1169. https://doi.org/10.1111/bor.12336
- [4] **Tomkins, M. D.,** Dortch, J.M., Hughes, P.D., Huck, J., Stimson, A., Delmas, M., Calvet, M., Pallàs, R. (2018). Rapid age assessment of glacial landforms in the Pyrenees using Schmidt hammer exposure dating (SHED), *Quaternary Research*, 90(1), 26-37. https://doi.org/10.1017/qua.2018.12.
- [3] **Tomkins, M. D.,** Dortch, J.M., Hughes, P.D., Huck, J., Tonkin, T.N., Barr, I.D. (2018). Timing of glacial retreat in the Wicklow Mountains, Ireland, conditioned by glacier size and topography, *Journal of Quaternary Science*, 33(6), 611-623, https://doi.org/10.1002/jqs.3040.
- [2] **Tomkins, M. D.,** Dortch, J.M., Hughes, P.D., Huck, J., Kirkbride, M.P., Barr, I.D. (2018). Schmidt Hammer exposure dating (SHED): Calibration procedures, new exposure age data and an online calculator, *Quaternary Geochronology*, 44, 55-62, https://doi.org/10.1016/j.quageo.2017.12.003.
- [1] **Tomkins, M. D.,** Dortch, J.M., Hughes, P.D. (2016). Schmidt Hammer exposure dating (SHED): Establishment and implications for the retreat of the last British Ice Sheet, *Quaternary Geochronology*, 33, 43-60, https://doi.org/10.1016/j.quageo.2016.02.002

BOOK CHAPTERS

- [7] Hughes, P.D., **Tomkins, M.D.**, Clark, C.D., Gibbard, P.L., Glasser, N.F. (2023) Holocene glacial and periglacial landscapes of Britain and Ireland. In Palacios, D., Hughes, P.D., Jomelli, V., Tanarro, L.M. (editors) *European Glacial Landscapes: The Holocene*. Elsevier, *Forthcoming*
- [6] Hughes, P.D., Clark, C.D., Gibbard, P.L., Glasser, N.F., **Tomkins, M.D.** (2023) Britain and Ireland: glacial landforms during the Younger Dryas. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Last Deglaciation*. Elsevier, 481-493, https://doi.org/10.1016/B978-0-323-91899-2.00028-0
- [5] Hughes, P.D., Clark, C.D., Gibbard, P.L., Glasser, N.F., **Tomkins, M.D.** (2023) Britain and Ireland: glacial landforms during the Bølling-Allerød Interstadial. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Last Deglaciation*. Elsevier, 319-327, https://doi.org/10.1016/B978-0-323-91899-2.00031-0
- [4] Hughes, P.D., Clark, C.D., Gibbard, P.L., Glasser, N.F., **Tomkins, M.D.** (2023) Britain and Ireland: glacial landforms during deglaciation. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Last Deglaciation*. Elsevier, 129-139, https://doi.org/10.1016/B978-0-323-91899-2.00027-9
- [3] Hughes, P.D., Clark, C.D., Gibbard, P.L., Glasser, N.F., **Tomkins, M.D.** (2022) Britain and Ireland: glacial landforms from the Last Glacial Maximum. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Maximum Extent of Glaciations*. Elsevier, 407-416, https://doi.org/10.1016/B978-0-12-823498-3.00033-9
- [2] Gibbard, P.L., Hughes, P.D., Clark, C.D., Glasser, N.F., **Tomkins, M.D.** (2022) Britain and Ireland: glacial landforms prior to the Last Glacial Maximum. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Maximum Extent of Glaciations*. Elsevier, 245-253, https://doi.org/10.1016/B978-0-12-823498-3.00050-9
- [1] Hughes, P.D., Clark, C.D., Gibbard, P.L., Glasser, N.F., **Tomkins, M.D.** (2022) Glacial landscapes of Britain and Ireland. In Palacios, D., Hughes, P.D., García Ruiz, J.M., Andrés, N. (editors) *European Glacial Landscapes: Maximum Extent of Glaciations*. Elsevier, 75-85, https://doi.org/10.1016/B978-0-12-823498-3.00014-5

TEACHING	The University of Manchester	Course ID
EXPERIENCE	Postgraduate courses:	
 2021/22 academic 	Understanding GIS (5 semesters)	GEOG71552
year	GIS & Environmental Applications (1 semester)	GEOG60951
	Environmental Monitoring and Modelling Concepts (2 semesters)	GEOG70581
	Undergraduate courses:	
	Mediterranean Quaternary Landscapes (2 semesters)	GEOG30132
	Geomorphology (1 semester)	GEOG21512
	Our Frozen Planet (1 semester)	GEOG30222
	Glaciers (1 semester)	GEOG20351
	Key Ideas (2 semesters)	GEOG10192
	Skills for Geographers - Quantitative Methods (2 semesters)	GEOG20621
	Green Planet: Plant Ecology and Global Change (2 semesters)	GEOG31041
RESEARCH	Ministerio de Ciencia e Innovación	
FUNDING	Contribution to scientific proposoal PID2020-119772RB-100 (neither PI or Co-PI).	€278,300
	"New approaches to earthquake source characterization and their effective integration into fault-b	,
	hazard models. Case studies in areas of low-to-intermediate activity of eastern Iberia (NSOURCE	
		-,, -
	Royal Geographical Society	
	Postgraduate Research Award, 2018	£2,000
	Dudley Stamp Memorial Award, 2017	£500
	Quaternary Research Association	
	New Research Workers' Award, 2018	£1,200
	British Society for Geomorphology	
	Postgraduate Research Grant, 2018	£600