

## Brian M. Chase

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### EDUCATION

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- June 2012 • **Habilitation à Diriger des Recherches en Sciences**, Université de Montpellier II  
May 2006 • **DPhil in Physical Geography/Earth System Science**, The University of Oxford  
Sept. 2002 • **MSc in Environmental Archaeology and Palaeoeconomy (Distinction)**  
The University of Sheffield  
Aug. 1997 • **BA in Geography (Magna cum Laude)**, Portland State University

### CURRENT APPOINTMENTS

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- 2015 - present **Director of Research, Centre National de la Recherche Scientifique**, Head of Paleoclimate Research Group, Institut des Sciences de l'Evolution-Montpellier, Université Montpellier, France  
2020 - present **Honorary Professor**, Department of Environmental and Geographical Sciences, University of Cape Town, South Africa.

### RESEARCH SUMMARY

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Refereed journal articles (rang A only): 92; Book chapters: 3; Invited seminars: 26; Conference presentations: 131

Citation Metrics: Google Scholar (04/2025): Citations = 8658; H-index = 48; i10-index = 78

### SELECTED RELEVANT PUBLICATIONS (\* = student author)

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J. Tyler Faith, **Brian M. Chase** and Justin Pargeter (2024). The Last Glacial Maximum climate at Boomplaas Cave, South Africa. **Quaternary Science Reviews**.

**Brian M. Chase**, Andrew S. Carr, Arnoud Boom, Paula J. Reimer (2023). Linking upwelling intensity and orbital-scale climate variability in South Africa's winter rainfall zone: insights from a ~70,000-year hyrax midden record. **Quaternary Science Advances**.

Andrew S. Carr, **Brian M. Chase**, Stephen J. Birkinshaw, Peter J. Holmes, Mulalo Rabumbulu\*, Brian A. Stewart (2023). Paleolakes and socioecological implications of last glacial "greening" of the South African interior. **Proceedings of the National Academy of Sciences**.

**Brian M. Chase**, Andrew S. Carr, Arnoud Boom, Paula J. Reimer (2022). Climate variability along the margin of the southern African monsoon region at the end of the African Humid Period. **Quaternary Science Reviews**.

Alex Mackay, Simon Armitage, Elizabeth Niespolo, Warren Sharp, Mareike Stahlschmidt, Alex Blackwood, Kelsey Boyd, **Brian M. Chase**, Susan E. Lagle, Chester F. Kaplan, Marika A. Low, Naomi L. Martisius, Patricia J. McNeill, Ian Moffat, Corey A. O'Driscoll, Rachel Rudd, Jayson Orton, Teresa E. Steele (2022) Environmental influences on human innovation and behavioural diversity in southern Africa 92–80 thousand years ago. **Nature Ecology & Evolution**.

**Brian M. Chase**, Chris Harris, Maarten De Wit, Jan Kramers, Sean Doel and Jacek Stankiewicz (2021). South African speleothems reveal influence of high- and low-latitude forcing over the last 113.5 kyr. **Geology**.

**Brian M. Chase** (2021). Orbital forcing in southern Africa: Towards a conceptual model for predicting deep time environmental change from an incomplete proxy record. **Quaternary Science Reviews** 265.

**Brian M. Chase**, Arnoud Boom, Andrew S. Carr, Lynne J. Quick, Paula J. Reimer (2020). High-resolution record of Holocene climate change dynamics from southern Africa's temperate-tropical boundary, Baviaanskloof, South Africa. **Palaeogeography, Palaeoclimatology, Palaeoecology** 539.

**Brian M. Chase**, Arnoud Boom, Andrew S. Carr, Manuel Chevalier, Lynne J. Quick, G. Anthony Verboom, Paula J. Reimer (2019). Extreme hydroclimate response gradients within the western Cape Floristic region of South Africa since the Last Glacial Maximum. **Quaternary Science Reviews** 219, 297-307.

J. Tyler Faith, **Brian M. Chase**, D. Margaret Avery (2019). Late Quaternary micromammals and the precipitation history of the southern Cape, South Africa. **Quaternary Research** 91, 848-860.

**Brian M. Chase**, J. Tyler Faith, Alex Mackay, Manuel Chevalier\*, Andrew S. Carr, Arnoud Boom, Sophak Lim\*, Paula J. Reimer (2018). Climatic controls on Later Stone Age human adaptation in Africa's southern Cape. *Journal of Human Evolution* **114**, 35-44.

**Brian M. Chase**, Manuel Chevalier\*, Arnoud Boom, Andrew S. Carr (2017). The dynamic relationship between temperate and tropical circulation systems across South Africa since the Last Glacial Maximum. *Quaternary Science Reviews* **174**, 54-62.

Manuel Chevalier\*, Simon Brewer and **Brian M. Chase** (2017). Qualitative assessment of PMIP3 rainfall simulations across the southeast African monsoon domain during the mid-Holocene and the Last Glacial Maximum. *Quaternary Science Reviews* **156**, 107-120.

Lynne J. Quick\*, Michael E. Meadows, Mark D. Bateman, Kelly L. Kirsten, Roland Mäusbacher, Torsten Haberzettl, **Brian M. Chase** (2016). Vegetation and climate dynamics during the last glacial period in the fynbos-afrotemperate forest ecotone, southern Cape, South Africa. *Quaternary International* **404**, 136-149.

**Brian M. Chase**, Arnoud Boom, Andrew S. Carr, Matthieu Carré, Manuel Chevalier\*, Michael E. Meadows, Joel B. Pedro, J. Curt Stager, Paula J. Reimer (2015). Evolving Southern Hemisphere response to abrupt deglacial North Atlantic climate change events. *Quaternary Science Reviews* **121**, 132-136.

**Brian M. Chase**, Louis Scott, Michael E. Meadows, Graciela Gil-Romera, Arnoud Boom, Andrew S. Carr, Paula J. Reimer, Loïc Truc\*, Verushka Valsecchi\*, Lynne J. Quick\* (2012). Rock hyrax middens: a palaeoenvironmental archive for southern African drylands. *Quaternary Science Reviews* **56**, 1-19.

Quick, L. J.\*, **Chase, B. M.**, Meadows, M. E., Scott, L., and Reimer, P. J. (2011). A 19.5 kyr vegetation history from the central Cederberg Mountains, South Africa: palynological evidence from rock hyrax middens.

**Chase, B. M.**, and Meadows, M. E. (2007). Late Quaternary dynamics of southern Africa's winter-rainfall zone. *Earth-Science Reviews* **84**, 103-138.

## SELECTED RELEVANT GRANTS AND RESEARCH SUPPORT

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2022-2025	National Science Foundation (Co-Investigator), Collaborative Research: Developing a high-resolution framework to define human-environment interactions across the Middle-to-Later Stone Age transition at Boomplaas Cave (US\$285,000)
2022-2024	South African National Research Foundation (Co-investigator): <i>Past dynamics and distribution of South Africa's biodiverse systems: revealing the environments of our ancestors and conserving our own</i> (R2,340,846).
2020-2022	South African National Research Foundation (Co-investigator): Palaeoenvironments of the Cape Floristic Region: exploring subregional variability in southern Cape palaeoclimates (R359,000).
2017-2022	National Geographic Society Research and Exploration Grant (Co-investigator): Surviving or thriving in the dry interior? Palaeoclimates, landscapes and Pleistocene human occupation of the Nama Karoo, South Africa (\$21,982).
2015-2019	International Union for Quaternary Research (INQUA) Paleoclimate Commission International Focus Group (Co-lead and African Sector Coordinator): Southern Hemisphere Assessment of PalaeoEnvironments (SHAPE) (€8,000/yr).
2013-2015	South African National Research Foundation grant (Co-investigator): Reconstructing the Mapungubwe Cultural Landscape (ZAR 2,737,000)
2010-2016	European Research Council Starting Grant (Principal investigator): Rock Hyrax Middens and Climate Change in Southern Africa during the last 50,000 years. (€1,484,000).
2006-2009	Leverhulme Trust Research Grant (Project designer and coordinator): Fossilised Herbivore Middens: New Perspectives on SW African Climate Change (£114,000).

## SELECTED ACADEMIC AWARDS

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- Laureate of European Research Council (ERC) Starting Grant
- Royal Society Newton International Fellowship
- CC Reeves Scholar in Physical Geography (St. Catherine's College, Oxford)
- British Council Overseas Research Scholarship
- British Geomorphological Research Group Postgraduate Research Grant