150th Anniversary

Geological Magazine

Editors

Mark Allen, University of Durham, UK Graham E. Budd, University of Uppsala, Sweden Philip Leat, British Antarctic Survey, UK Andy Whitham, CASP, University of Cambridge, UK

Geological Magazine, established in 1864, is one of the oldest and best-known periodicals in the Earth Sciences. Its worldwide circulation, broad scope and high production values keep the journal at the forefront of the field. It publishes original papers, review articles, rapid communications and discussions about all aspects of the geosciences. It covers petrology, geochemistry, palaeontology, sedimentology, stratigraphy, structural geology, geophysics, and geomorphology, and it includes contributions on volcanology, marine geology, glaciology, palaeoclimatology, palaeoceanography, geochronology, biostratigraphy, geohazards and Earth history, providing a niche for interdisciplinary papers on regional geology and Earth history.

Price information

is available at: http://journals.cambridge.org/geo

Free email alerts

Keep up-to-date with new material – sign up at http://journals.cambridge.org/geo-alerts



Geological Magazine is available online at:

http://journals.cambridge.org/geo

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/geo



Earth and Environmental Science Transactions of The Royal Society of Edinburgh

Marketed and distributed for The Royal Society of Edinburgh

Editor-in-Chief

P. M. Bishop, University of Glasgow, UK

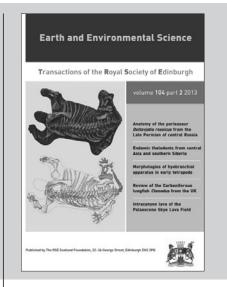
Earth and Environmental Science Transactions (formerly Transactions of the Royal Society of Edinburgh: Earth Sciences) is a general earth sciences journal publishing a comprehensive selection of substantial peer-reviewed research papers, reviews and short communications of international standard across the broad spectrum of earth and environmental geosciences. The journal prides itself on the quality of its graphics and photographic reproduction. The Editors are keen to encourage interdisciplinary papers and Transactions also publishes occasional special symposia and invited volumes of specific interest.

Price information

is available at: http://journals.cambridge.org/tre

Free email alerts

Keep up-to-date with new material — sign up at http://journals.cambridge.org/tre-alerts



Earth and Environmental Science Transactions of the Royal Society of Edinburgh

is available online at: http://journals.cambridge.org/tre

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/tre



Antarctic Science

Published on behalf of Antarctic Science Ltd, Cambridge

Editors

Laurie Padman, Earth & Space Research, Corvallis, USA Walker O. Smith, Virginia Institute of Marine Sciences, USA Alan P. M. Vaughan, British Antarctic Survey, Cambridge, UK David W. H. Walton, British Antarctic Survey, Cambridge, UK

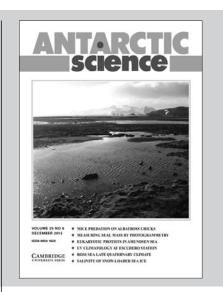
Antarctic Science provides a truly international forum for the broad spread of studies that increasingly characterize scientific research in the Antarctic. The journal attracts papers from all countries currently undertaking Antarctic research. Whilst emphasising interdisciplinary work, the journal publishes papers from environmental management to biodiversity, from volcanoes to icebergs, and from oceanography to the upper atmosphere. No other journal covers such a wide range of Antarctic scientific studies.

Price information

is available at: http://journals.cambridge.org/ans

Free email alerts

Keep up-to-date with new material – sign up at http://journals.cambridge.org/ans-alerts



Antarctic Science

is available online at: http://journals.cambridge.org/ans

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/ans



Polar Record

A Journal of Arctic and Antarctic Research

The official journal of the Scott Polar Research Institute

Editor-inChief

lan R. Stone, Scott Polar Research Institute, Cambridge, UK

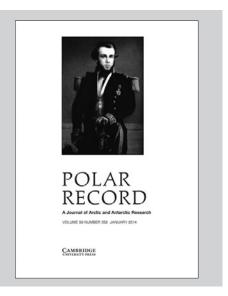
Polar Record is the premier international, peer-reviewed, scholarly journal, publishing articles on a wide variety of areas of polar research in both the Arctic and the Antarctic and keeping its readers up-to-date with an extensive range of topics and concerns. The journal includes original primary research papers in the physical sciences, life sciences, polar technology, humanities, and social sciences, as well as papers concerning current political, economic, legal, and environmental issues. Polar Record provides rapid publication, normally within nine months of the initial submission.

Price information

is available at: http://journals.cambridge.org/pol

Free email alerts

Keep up-to-date with new material — sign up at http://journals.cambridge.org/pol-alerts



Polar Record

is available online at: http://journals.cambridge.org/pol

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/pol



Advisory Board

- H. Brinkhuis, Laboratory of Palaeobotany and Palynology, Dept of Earth Sciences, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands. Also at: Royal Netherlands Institute for Sea Research NIOZ, P.O. Box 59, 1790 AB Den Burg, Texel, the Netherlands
- S.A.P.L. Cloetingh, Tectonics Group, Dept of Earth Sciences, Utrecht University, Budapestlaan 4, 3584CD Utrecht, the Netherlands
- G. de Lange, Geochemistry Group, Dept of Earth Sciences, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands
- Ph. Gibbard, Department of Geography, University of Cambridge, Downing Place, Cambridge CB2 3EN, United Kingdom
- H. Middelkoop, Global Change Geomorphology Group, Dept Physical Geography, Utrecht University, P.O. Box 80015, 3508 TC Utrecht, the Netherlands
- H. Renssen, Earth and Climate Cluster, Dept of Earth Sciences, VU University Amsterdam, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands
- J. Rose, Department of Geography, Royal Holloway University of London, Egham, Surrey TW20 0EX, United Kingdom
- J. B. Stuut, Royal Netherlands Institute for Sea Research NIOZ, P.O. Box 59, 1790 AB Den Burg, Texel, the Netherlands
- N. Vandenberghe, Institute of Earth Sciences, Leuven University, Redingenstraat 16bis, B-3000 Leuven, Belgium
- B. van Geel, Institute for Biodiversity and Ecosystems (IBED), Department of Palynology, University of Amsterdam, Kruislaan 318, 1098 SM Amsterdam, the Netherlands
- M.J. van der Meulen, TNO Geological Survey of the Netherlands, P.O. Box 80015, 3508 TA Utrecht, the Netherlands

Editorial Board

See http://journals.cambridge.org/NJG

Access to NJG online

From 2014, Netherlands Journal of Geosciences is published online at http://journals.cambridge.org/NJG Subscribers receive access to all content from 2009.

Copyright

© Stichting Netherlands Journal of Geosciences.

Copying

This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923,USA (www.copyright.com). Organizations in the USA who are also registered with CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC. This consent does not extend to multiple copying for promotional or commercial purposes. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

For all other use, permission should be sought from Cambridge University Press.

Cover Image: November 2007 storm surge eroding the western Netherlands coastal dunes near Bergen aan Zee. During the surge event, the foredune was forced back almost 10 m. This revealed a thick sedimentary archive showing evidence of Holocene coastal processes and events. Photo by: Marcel Bakker, TNO - Geological Survey of the Netherlands.

Netherlands Geologie Journal of Mijnbouw Geosciences

Contents Volume 93, Issue 3 September 2014

The late Maastrichtian to Late Paleocene tectonic evolution of the southern part of the Roer Valley Graben (Belgium) J. Deckers, M. Broothaers, D. Lagrou & J. Matthijs	83
Measurements on the transport of suspended particulate matter in the Vlie Inlet T. Gerkema, J. J. Nauw & C. M. van der Hout	95
Weichselian and Holocene climate history reflected in temperatures in the upper crust of the Netherlands M. ter Voorde, R. van Balen, E. Luijendijk & H. Kooi	107
Small mammal assemblages from the Quaternary succession at Moriaanshoofd (Zeeland, the Netherlands) and their significance for correlating the Oosterschelde fauna	
D. F. Mayhew, F. E. Dieleman, A. A. Slupik, L. W. van den Hoek Ostende & J. W. F. Reumer	119



