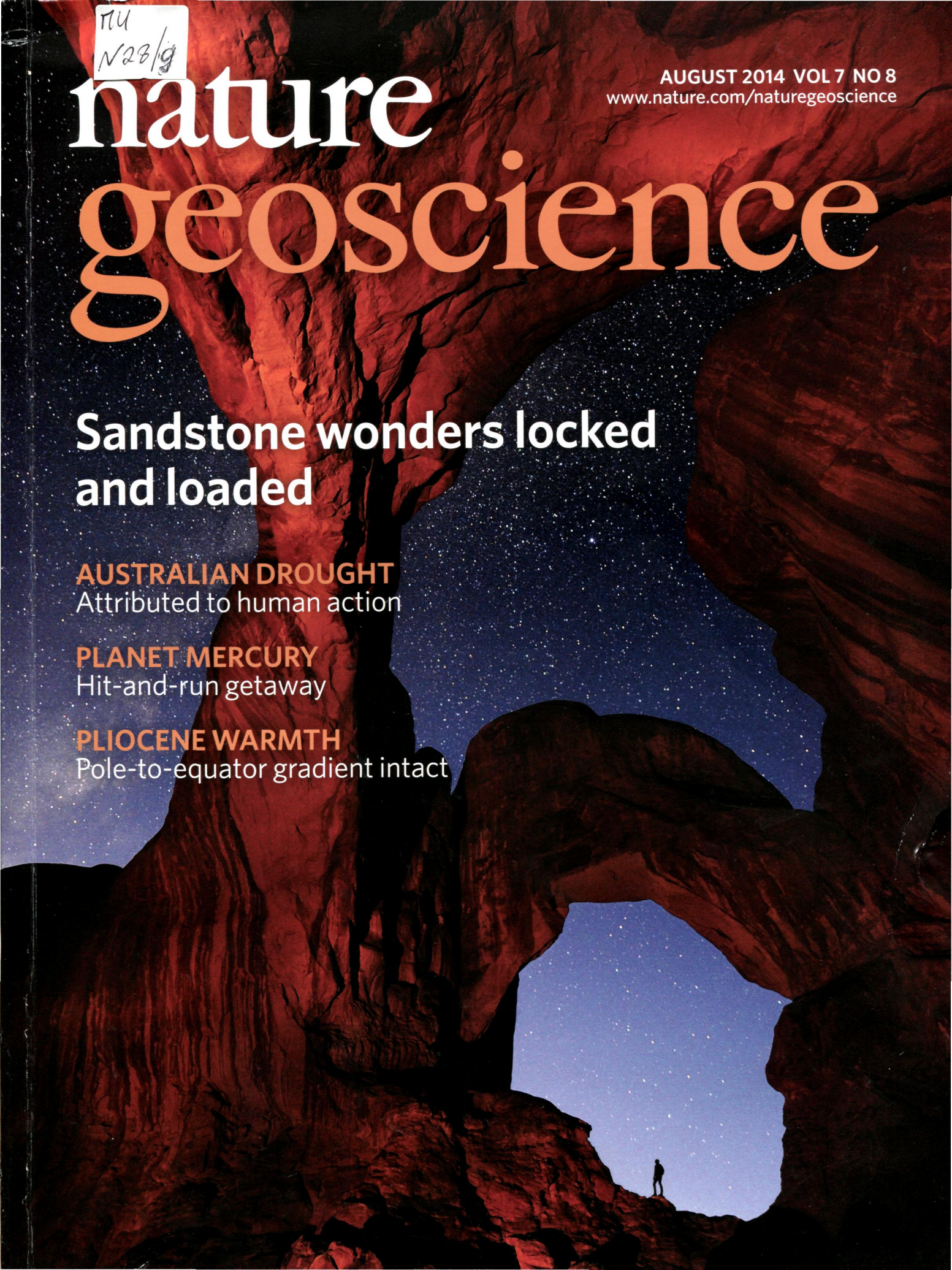
AUGUST 2014 VOL 7 NO 8
www.nature.com/naturegeoscience

nature geoscience



Sandstone wonders locked and loaded

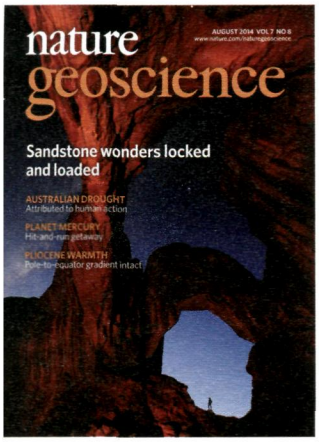
AUSTRALIAN DROUGHT
Attributed to human action

PLANET MERCURY
Hit-and-run getaway

PLIOCENE WARMTH
Pole-to-equator gradient intact

AUGUST 2014 VOL 7 ISSUE 8

nature geoscience



COVER IMAGE

The formation and preservation of sandstone landforms such as pillars and arches are enigmatic. Experiments and numerical modelling show that load-bearing material weathers more slowly, and thus the internal stress field can shape and stabilize sandstone landforms. The image shows Double Arch at Arches National Park in Utah, USA at night.

Letter p597; News & Views p552

IMAGE: MARSEL VAN OOSTEN

COVER DESIGN: DAVID SHAND

ON THE COVER

Australian drought
Attributed to human action
Letter p583; News & Views p551

Planet Mercury
Hit-and-run getaway
Letter p564

Pliocene warmth
Pole-to-equator gradient intact
Article p606; News & Views p555

Nature Geoscience is printed on paper recycled from post-consumer waste.

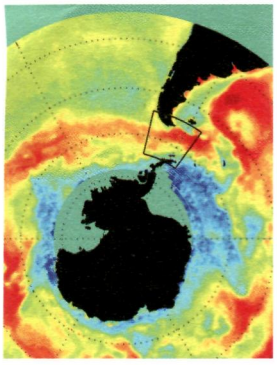
EDITORIAL

CORRESPONDENCE

NEWS & VIEWS

PROGRESS ARTICLE

LETTERS



In the Southern Ocean, deepwater masses of the world ocean upwell to the surface and subsequently sink to intermediate and abyssal depths in two overturning cells. Observational evidence relates changes in abyssal mixing — a key influence on the lower cell — to oceanic eddy variability.
Letter p577; News & Views p554

Despite the role that calving plays in Greenland mass loss, the mechanisms of calving are poorly constrained. Observations of Greenland's Helheim Glacier suggest that buoyant flexure at the glacier terminus leads to the propagation of basal crevasses and iceberg calving.
Letter p593

ARTICLES

nature publishing group

Nature Geoscience (ISSN 1752-0894, USPS 025065) is published monthly by Nature Publishing Group, a division of Macmillan Publishers Ltd, The Macmillan Building, 4 Crinan Street, London N1 9XW, UK.

US Periodicals postage paid at Jamaica, NY, and additional mailing post offices. US POSTMASTER: Send address changes to Nature Publishing Group, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.