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ARCTIC METHANE RELEASE
Bubbles and storms

ANCIENT GRAPHITE
Remnants of early life

DENSE ARCHAEAN CRUST
Recycled in drips

Signs of flowing water on Mars?

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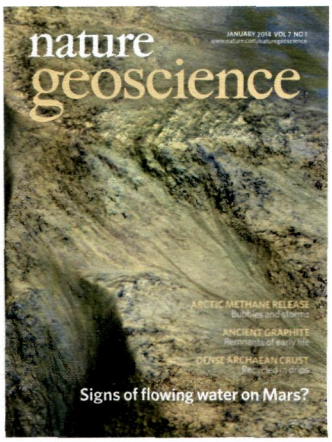

COVER IMAGE

Dark streaks that appear on the surface of Mars during warm seasons have been observed at the mid-latitudes and tentatively attributed to the flow of briny water. Imagery from the Mars Reconnaissance Orbiter over multiple Mars years suggests that these seasonally active features are also present in equatorial regions, where liquid surface water is not expected. The image shows dark, narrow flows called recurring slope lineae that are more than 1 km long in this portion of Eos and Capri Chasma in eastern Valles Marineris, Mars. The image is in enhanced infrared-shifted colour, and downhill is to the right or the bottom.

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IMAGE: NASA/JPL/UNIVERSITY OF ARIZONA

COVER DESIGN: DAVID SHAND

ON THE COVER

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EDITORIAL

CORRESPONDENCE

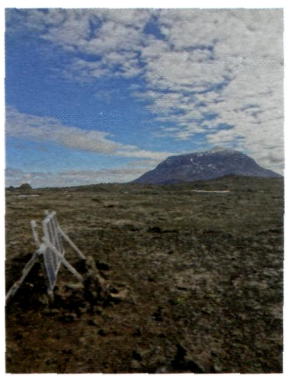
IN THE PRESS

RESEARCH HIGHLIGHTS

NEWS & VIEWS

LETTERS

The first known phosphorus-rich deposits formed 2 billion years ago, but their origins are unclear. Geochemical and palaeontological analyses of 2-billion-year-old deposits from northwest Russia suggest that the presence of sulphur-oxidizing bacteria and a sharp oxic–anoxic transition in the sediments allowed for phosphorus accumulation in this setting. Image: Kalle Kirsimäe
Letter p20



At mid-ocean ridges, the movements between rift segments is usually accommodated by transform faults that are oriented perpendicular to the rift axis. Analysis of seismic data from rift segments exposed in Iceland show that such movements can also occur through the rotation of several small faults and crustal blocks that slip like books tilting on a shelf. Image: Robert Green
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ARTICLES

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