

Published on *American Geosciences Institute* (<https://www.americangeosciences.org>)

Home > EARTH: Reading the Ridges - Are Climate and the Seafloor Connected?

EARTH: Reading the Ridges - Are Climate and the Seafloor Connected?

EARTH: Reading the Ridges - Are Climate and the Seafloor Connected?

FOR IMMEDIATE RELEASE

Maureen Moses (mmoses@americangeosciences.org)

5/2/2016

Alexandria, VA - EARTH Magazine plunges into the depths of the ocean with scientists seeking whether Earth's climate and sea-level history are intrinsically linked with tectonics at mid-ocean ridges. Since these ridges are not as well studied as terrestrial volcanoes, largely given the challenge to access them, teams of researchers are using tectonic models, evidence from high-resolution mapping of different spreading ridges and sediment cores to examine the evidence.

When a potential link between climate, sea-level change and mid-ocean ridge volcanism was first proposed, it was met with considerable push-back from leading experts in the field. Dissent through published comments and rebuttals, though vigorous, did not dismiss the possibility outright, but dissenters argued that certain fundamental ideas to mid-ocean ridge tectonism, such as the role faulting plays needed to be preserved.

The community is now looking at spreading rates, how global glaciations affect the mass of the overlying water column, and how Earth's orbit changes as over time to determine if there is a significant signal of this relationship in the data and geologic records. Get the inside scoop on this hot debate in EARTH Magazine: <http://bit.ly/1OauztJ>.

EARTH Magazine brings you the lively debate that makes the geoscience community so vibrant. The May 2016 issue, available now at www.earthmagazine.com, is filled with the latest research including: how "hot Jupiter" atmospheres are coming into focus, whether the Medieval Warm Period helped the Vikings survive in Greenland, and whether life exists in the coldest and driest regions of Antarctica.

###

Keep up to date with the latest happenings in Earth, energy and environment news with EARTH Magazine online at: <http://www.earthmagazine.org/>. Published by the American Geosciences Institute, EARTH is your source for the science behind the headlines.

###

The American Geosciences Institute is a nonprofit federation of geoscientific and professional associations that represents more than 250,000 geologists, geophysicists and other earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in the profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resiliency to natural hazards, and interaction with the environment.

Press Release PDF:



02MAY2016_MORClimate.pdf
