



## Geophysical Research Letters

16 May 2020 • Volume 47 • Issue 9



## **Geophysical Research Letters**

AN AGU JOURNAL

Aims and Scope. Geophysical Research Letters publishes high-impact, innovative, and timely research on major scientific advances in all the major geoscience disciplines. Papers are communications-length articles and should have broad and immediate implications in their discipline or across the geosciences. GRL maintains the fastest turn-around of all high-impact publications in the geosciences and works closely with authors to ensure broad visibility of top papers.

Editors: Hairhar Rajaram (Editor-in-Chief) (<u>hrajara1@jhu.edu</u>, <u>bhttp://orcid.org/0000-0003-2040-358X</u>), Suzana J. Camargo, Rebecca J. Carey, Rose Cory, Andrew J. Dombard, Kathleen A. Donohue, Lucy M. Flesch, Alessandra Giannini, Gavin P. Hayes, Andy M. Hogg, Valeriy Ivanov, Steven D. Jacobsen, Monika Korte, Gang Lu (<u>bhttp://orcid.org/0000-0001-5350-2889</u>), Gudrun Magnusdottir, Mathieu Morlighem, Merav Opher (<u>bhttp://orcid.org/0000-0002-8767-8273</u>), Christina M. Patricola, Jeroen Ritsema (<u>bhttp://orcid.org/0000-0002-8767-8273</u>), Janet Sprintall (<u>bhttp://orcid.org/0000-0002-7428-7580</u>), Julienne Stroeve (<u>bhttp://orcid.org/0000-0002-0476-381X</u>), Hui Su, Joel A. Thornton, Valerie M. Trouet (<u>bhttp://orcid.org/0000-0002-2683-8704</u>), Kaicun Wang, Angelicque E. White, Andrew Yau.

**Associate Editors:** Olivier Bachmann, David A. Bailey, Marine Denolle, Kathleen A. Donohue, Mathieu Dumberry, Sarah Feakins, Ake Fagereng, Melodie French, Yu Gu, Mingming Li, Paola Passalacqua, Adrian V. Rocha, Christopher Spencer, Daoyuan Sun, Toste Tanhua, Jacob Tielke, Aradhna E. Tripati, Harm Van Avedonk, Mathias Vuille.

**AGU Editorial Team.** For assistance with submitted manuscripts, file specifications, or AGU publication policy please contact <u>grlonline@agu.org</u>.

For submission instructions or to submit a manuscript visit: <a href="http://grl-submit.agu.org">http://grl-submit.agu.org</a>.

The journal to which you are submitting your manuscript employs a plagiarism detection system. By submitting your manuscript to this journal you accept that your manuscript may be screened for plagiarism against previously published works.

*Geophysical Research Letters* accepts articles for Open Access publication. Please visit <u>http://olabout.wiley.com/WileyCDA/Section/id-406241.html</u> for further information about OnlineOpen.

**Publication Charges.** The publication charge income received for *Geophysical Research Letters* helps support rapid publication, allows more articles per volume, makes possible the low subscription rates, and supports many of AGU's scientific and outreach activities. Publication charge information can be found here: <u>http://publications.agu.org/</u><u>author-resource-center/</u>.

To encourage papers to be written in a concise fashion, there is an excess length fee. For *Geophysical Research Letters* the fee is assessed only on the equivalent of more than 12 publication units. The excess length fee does not apply to review articles, and the editor may waive the fee on a limited number of concisely written papers that merit being longer. There is no charge for color in any format.

**Copyright and Photocopying.** Copyright © 2020. American Geophysical Union. All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to copy items for internal and personal use is granted by the copyright holder for libraries and other users registered with their local Reproduction Rights Organisation (RRO), e.g. Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA (www. copyright.com), provided the appropriate fee is paid directly to the RRO. This consent does not extend to other kinds of copying such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale. Permissions for such reuse can be obtained using the RightsLink "Request Permissions" link on Wiley Online Library. Special requests should be addressed to: permissions@wiley.com.

**Disclaimer.** The Publisher, American Geophysical Union, and Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher, American Geophysical Union, and Editors, neither does the publication of advertisements constitute any endorsement by the Publisher, American Geophysical Union, and Editors of the products advertised.

Individual Subscriptions. Member subscriptions are available through members.agu.org or by contacting the AGU Member Service Center. The Service Center is open from 8:00 a.m. to 8:30 p.m. Eastern time: +1 202 462 6900, +1 800 966 2481; Fax: +1 202 777 7393; e-mail: service@agu.org. Questions about meetings or membership will be referred to the appropriate staff.

**Publisher.** Geophysical Research Letters is published on behalf of the American Geophysical Union by Wiley Periodicals LLC, 111 River St., Hoboken, NJ, 07030-5774, +1 201 748 6000.

**Delivery Terms and Legal Title.** Where the subscription price includes print issues and delivery is to the recipient's address, delivery terms are Delivered at Place (DAP); the recipient is responsible for paying any import duty or taxes. Title to all issues transfers FOB our shipping point, freight prepaid. We will endeavour to fulfil claims for missing or damaged copies within six months of publication, within our reasonable discretion and subject to availability.

GEOPHYSICAL RESEARCH LETTERS, (ISSN 0094-8276), is published semi-monthly by Wiley Subscription Services, Inc., a Wiley Company, 111 River St., Hoboken, NJ 07030-5774.

Periodical Postage Paid at Hoboken, NJ and additional offices.

Postmaster: Send all address changes to GEOPHYSICAL RESEARCH LETTERS, John Wiley & Sons Inc., C/O The Sheridan Press, PO Box 465, Hanover, PA 17331.

**Journal Customer Services.** For institutional subscription information, claims and any enquiry concerning your journal subscription please go to <u>https://hub.wiley.com/community/support/onlinelibrary</u> or contact your nearest office.

**Americas:** Email: <u>cs-journals@wiley.com</u>; Tel: +1 781 388 8598 or +1 800 835 6770 (toll free in the USA & Canada).

**Europe, Middle East and Africa:** Email: <u>cs-journals@wiley.com;</u> Tel: +44 (0) 1865 778315.

Asia Pacific: Email: <u>cs-journals@wiley.com</u>; Tel: +65 6511 8000. Japan: For Japanese speaking support, Email: <u>cs-japan@wiley.com</u>.

Visit our Online Customer Help available in 7 languages at <u>https://hub.wiley.com/community/support/onlinelibrary</u>.

**Production Editor.** For assistance with post-acceptance articles and other production issues please contact <u>GRLprod@wiley.com</u>.

Access to this journal is available free online within institutions in the developing world through the AGORA initiative with the FAO, the HINARI initiative with the WHO, the OARE initiative with UNEP, and the ARDI initiative with WIPO. For information, visit <u>www.aginternetwork.org</u>, <u>www.who.int/hinari/en/</u>, <u>www.oaresciences.org</u>, or <u>www.wipo.int/ardi/en</u>.

ISSN 0094-8276 (Print) ISSN 1944-8007 (Online)

View this journal online at http://grl.agu.org

**Cover:** Fissure 8 eruption and the lava flow during the 2018 Kilauea Volcano eruption. See also Wu et al. (e2019GL086668; <u>https://doi.org/10.1029/2019GL086668</u>). Photo credit: USGS.