

# COMPTES RENDUS GEOSCIENCE

Editorial office: Académie des sciences, 23, quai de Conti, 75006 Paris, France  
Tel.: (+33) (0)1 44 41 43 72; Fax: (+33) (0)1 44 41 45 23  
sec.geopalphy@academie-sciences.fr

Institut de physique du globe, 1, rue Jussieu, 75005 Paris, France  
Tel.: (+33) (0)1 83 95 74 40  
larousse@ipgp.fr

**Purpose of the journal:** The *Comptes rendus Geoscience* are open to all scientists, regardless of their title or nationality. An article published in the *Comptes rendus* should be the first report of an important discovery or a significant result. It benefits from a fast publication schedule once it has been accepted, which makes it possible to establish priority.

The journal also publishes thematic issues coordinated by Invited Editors, and consisting of articles written on invitation.

**Editorial director:** Étienne Ghys

**Editorial College:**

– **Editor-in-Chief:** Vincent Courtillot

– **Associate editors:** James Badro (IPG, Paris), Sylvie Bourquin (université Rennes-1), Michel Campillo (UJF, Grenoble), Philippe Cardin (UJF, Grenoble), François Chabaux (LHYGES, Strasbourg), Marc Chaussidon (CRPG, Nancy), Marguerite Godard (université Montpellier-2), Isabelle Manighetti (université de Nice), Didier Roche (LSCE, Gif-sur-Yvette)

**Editorial secretaries:** Adenise Lopes (Académie des sciences) & Sylvie Larousse (IPGP)

**Scientific secretary:** Hélène Paquet (Académie des sciences)

**Indexing:**

Cambridge Scientific Abstracts, Current Contents, ISI, Geoabstracts, Geobase, Georef, Inspec, Pascal, Scopus

---

© 2019 Académie des sciences. All rights reserved.

Published by Elsevier Masson S.A.S., Simplified joint stock company with sole shareholder, with a capital of 47,275,384 euros

**Registered office:** 65, rue Camille-Desmoulins, 92130 Issy-les Moulineaux - France

Nanterre Commercial Registry 542 03703

**Publication information:** *Comptes Rendus Geoscience* (ISSN 1631-0713). For 2019, volume 351 is scheduled for publication. From 2018 all subscription is electronic only, prices are available upon request from the Publisher or from the Regional Sales Office nearest to you or from the Journal's website. Further information is available on the Journal and other Elsevier products through Elsevier's website: (<http://www.elsevier.com>). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis.

**Desk editor** – Jean-Michel Blengino. Tel.: (+33) (0)1 71 16 54 90. Fax: (+33) (0)1 71 16 51 84.

E-mail: [j.blengino@elsevier.com](mailto:j.blengino@elsevier.com)

**Subscriptions** – Tel: (+33) (0)1 71 16 55 99. Fax: (+33) (0)1 71 16 55 77. E-mail: [infos@elsevier-masson.fr](mailto:infos@elsevier-masson.fr)

**Publisher** – Giovanni Raneri

**President** – Daniel Rodriguez

**Author enquiries**

For enquiries relating to the submission of articles, please visit Elsevier's Authors Home at <http://www.elsevier.com/authors>. This also provides the facility to track accepted articles and set up e-mail alerts to inform you of when an article's status has changed, as well as detailed artwork guidelines, copyright information, frequently asked questions and more. Contact details for questions arising after acceptance of an article, especially those relating to proofs, are provided after registration of an article for publication.

The summaries of each issue and of each article published in *C. R. Geoscience* are available free of charge on the websites [www.em-consulte.com](http://www.em-consulte.com) and [www.sciencedirect.com](http://www.sciencedirect.com).

---

Imprimé en France par Jouve  
53101 Mayenne, France  
Dépôt légal à parution

Commission paritaire : 0617 T 81864  
Périodicité : 8 numéros par an