



Geophysical Fluid Dynamics

Collection Editor:

Prof. Dr. Pavel S. Berloff
Department of Mathematics,
Imperial College London,
London, UK

Message from the Collection Editor

Dear Colleagues,

Geophysical Fluid Dynamics (GFD) is a relatively young, but rapidly growing, branch of fluid mechanics that deals with a great variety of complex multiscale flow patterns and distributions of material properties arising in planetary atmospheres and oceans. These flow patterns are typically controlled by planetary rotation, various boundary conditions, and ubiquitous fluid density gradients. They interact with each other and combine on large scales to establish the climate. GFD employs mathematical analysis and computational modeling to deal with fundamental aspects, analyses and, ultimately, interpretations of the observed phenomena. To a large degree, the observed complexity of geophysical motions is due to the nonlinearity of the fluid dynamics, which connects GFD research with other branches of fluid mechanics. The Special Issue, “Geophysical Fluid Dynamics”, of the journal welcomes your new research contributions to the field.

Prof. Dr. Pavel S. Berloff
Collection Editor





fluids



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. D. Andrew S. Rees

Department of Mechanical
Engineering, University of Bath,
Bath BA2 7AY, UK

Message from the Editor-in-Chief

Fluids (ISSN 2311-5521) is an international journal on all aspects of fluids in open access format: research articles, reviews and other contents are released on the internet immediately after acceptance. You are invited to contribute a research article or a comprehensive review for consideration and publication in *Fluids*. The scientific community and the general public have unlimited free access to the content as soon as it is published. Please consider *Fluids* as an exceptional, exciting enterprise ready to reward your trust, attention, and active participation.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Fluids Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/fluids
fluids@mdpi.com
[X@FluidsMdpi](https://twitter.com/FluidsMdpi)