Special Issue

Ice-Ocean-Atmosphere Exchanges in the Arctic Region and Its Impacts

Message from the Guest Editor

Dear colleagues, The Arctic is warming faster than any other region of the world, a phenomenon which is known as the amplification of global climate changing. Arctic warming has accelerated and resulted in the reduction of multi-year and single-year sea ice in this region. Sea ice plays a fundamental role in regulating key earth system processes, including nutrient cycling, air–sea gas exchanges, and climate changes in the Arctic regions. The sea ice retreat in the Arctic Ocean will significantly impact ice–ocean-atmosphere exchanges of different materials, such as CO2, N2O, CH4, DMS, VOCs, aerosols, etc. The increase of greenhouse gases, DMS, and aerosols due to sea ice melting in the Arctic will significantly impact regional climates and change the carbon and sulfur cycles between the ocean and the atmosphere. However, how the sea ice melting impacts ice–ocean-atmosphere exchange is a question whose answer is still a mystery when it comes to the Arctic Ocean, due to the limitations of field observations. This Special Issue aims to better understand the response and feedback of ice–ocean-atmosphere interaction to the rapid changes of the Arctic.

Guest Editor

Dr. Jinpei Yan

Key Laboratory of Global Change and Marine-Atmospheric Chemistry, Third Institute of Oceanography, MNR, Xiamen, China

Deadline for manuscript submissions

closed (25 November 2022)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/78450

Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

mdpi.com/journal/water

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/journal/water

About the Journal

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST
Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

MDPI