Special Issue

Research on the Carbon and Water Cycle in Aquatic Ecosystems

Message from the Guest Editors

The land-to-ocean aquatic continuum (LOAC), constituted by rivers, lakes, estuaries, tidal wetlands, and continental shelf waters, is recognized as an important pipeline and reactor for different forms of natural C. LOAC C cycling involves multiple biological, chemical, geological, and physical processes from different interfaces between land, water, and atmosphere. As we are limited by observational data and assessment methodology, there still exists a large knowledge gap in understanding the biogeochemical processes and associated drivers of LOAC C cycling. The scope of this Special Issue includes, but is not limited to, the following: (1) observation, simulation, and evaluation of the multi-interface and multi-process C cycling (such as C evasion, C burial, C transportation, and C metabolism) in aquatic ecosystems; (2) the C flux and budget of aquatic ecosystems ranging from regional to global scales; (3) the coupling mechanism between the hydrologic process and C cycling; (4) the response of aquatic ecosystem C biogeochemistry to climate change and human activities.

Guest Editors

Dr. Kun Sun

Key Laboratory of Ecosystem Network Observation and Modeling, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China

Dr. Junjie Jia

Key Laboratory of Ecosystem Network Observation and Modeling, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China

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

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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

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