Special Issue

Climate Change and Its Effects on Permafrost

Message from the Guest Editor

Climate usually fluctuates, and the changes affect the environment in many ways. Permafrost areas are unique in that they are usually characterized by a large build-up of ice in the ground. Any changes in temperature result in changes in soil volume, thickness of the active layer and underlying permafrost resulting from thawing or accumulation of ice, changes in vegetation, strength of the ground, etc. They also cause sequestering or release of carbon, heaving or subsidence, changes in strength of the ground, creep or flowage of surface materials and development of thermokarst features such as retrogressive thaw flows and landslides, alases, lakes, and ponds. This book will consist of a series of papers exploring and summarizing our present state of knowledge of these changes. This is sorely needed if the cold Arctic lands in the Northern Hemisphere are to be successfully developed.

Guest Editor

Dr. Stuart A. Harris

Department of Geography, University of Calgary, Calgary, AB T2N 1N4, Canada

Deadline for manuscript submissions

closed (15 December 2021)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/58492

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

mdpi.com/journal/atmosphere

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/journal/atmosphere

About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

Dr. Daniele Contini
Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

MDPI