Special Issue

Heat Wave, Bush Fire and Air-Quality: Impacts on Respiratory Health

Message from the Guest Editors

A heatwave is a condition where there is a considerable increase in temperature which lasts for a prolonged period of time, mostly for two to three days. The cause of air trapping is a temperature difference of the atmosphere. With a broader viewpoint, the primary reason for both bushfires and heatwaves is high temperature. Emissions from bushfire smoke significantly affect the air-quality, and bushfire smoke contains ultrafine particular matter 2.5 (PM2.5), which when inhaled is able to penetrate the deeper lungs compared to larger particles such as PM10. Ultrafine particles in lung can cause inflammation in the respiratory system and may also enter the bloodstream. People with existing respiratory health conditions such as asthma are at an even higher risk of exacerbating their quality of life. This special issue aims to construct a precise understanding of how heatwaves, bushfires associated air quality impact on public respiratory health. This Special Issue is open to any subject area related to the topics of heatwave, bush fire, air quality and associated public respiratory health. The listed keywords suggest a selection of subject areas.

Guest Editors

Dr. Saidul Islam

School of Mechanical and Mechatronic Engineering, University of Technology Sydney (UTS), 15 Broadway, Ultimo, NSW 2007, Australia

Dr. Gunther Paul

Australian Institute of Tropical Health and Medicine, James Cook University, Townsville, QLD 4810, Australia

Deadline for manuscript submissions

closed (18 January 2023)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/73428

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

MDPI

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))