Special Issue

Wind Gusts: Observations, Processes, and Predictions

Message from the Guest Editors

A wind gust is commonly defined as a sudden but short-lived increase in wind speed. Wind gusts can threaten the safety or serviceability of various man-made objects, such as aircraft, trains, fan blades, buildings, bridges, and other wind-sensitive civil structures. Mechanisms for the generation of wind gusts are complicated. Wind gusts may be attributed to the internal structures of violent storms (e.g., tropical cyclones, downbursts, tornadoes), the influence of orographic/topographic features, deep convection, or combinations of the above factors. Such complexities lead to a distinct spatial and temporal variability of a wind gust. During the past several decades, continuous efforts have been made to understand this phenomenon. Despite the outstanding achievements that have been made, much still remains to be further explored. We look forward to your submissions, and to achieving a Special Issue representing the growing community of scientists involved in the observation, process, and prediction of gust wind.

Guest Editors

Prof. Dr. Yun-Cheng He

Dr. Ying-Hou He

Dr. Yong Cao

Deadline for manuscript submissions

closed (31 December 2023)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/si/124534

Atmosphere
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 2.5
CiteScore 4.6

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