

## Special Issue

# Soil/Mineral Dust Aerosols in the Earth System

### Message from the Guest Editor

Dust is one of the most important aerosols in the Earth system. It directly alters radiative fluxes in the atmosphere. The redistribution of radiative energy by dust aerosols influences the thermodynamic environment for cloud formation, which also affects the hydrological cycle and large-scale atmospheric circulation. Dust particles are also involved in cloud microphysical processes. Dust particles take up trace gases by heterogeneous chemical reactions, they mix with other aerosols, and they are very important for the biogeochemical cycles of the planet. Bacteria and fungi are advected with dust, potentially affecting human health. For this Special Issue, we invite you to present your new research on the diverse and complex properties of soil dust aerosols as well as how dust aerosols are involved in the various processes in the Earth system. Both measurement and modeling studies are welcome.

---

### Guest Editor

Dr. Jan P. Perlwitz

Climate, Aerosol, and Pollution Research, LLC, Bronx, New York, USA;  
NASA Goddard Institute for Space Studies, New York, NY, USA

---

### Deadline for manuscript submissions

closed (15 February 2020)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/21541](https://mdpi.com/si/21541)

*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)

[mdpi.com/journal/  
atmosphere](https://mdpi.com/journal/atmosphere)





# Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/journal/  
atmosphere](https://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))