

## Special Issue

# Sand and Dust Storms' Environmental and Ecosystem Impacts

### Message from the Guest Editors

Nowadays, sand and dust storms (SDS) are considered a global issue across a wide range of environmental conditions and research disciplines. The focus of the Special Issue is to cover the impacts/effects of SDS on the various dimensions of natural and human-managed environments and ecosystems, including:

- Interactions of SDS and climate change;
- Investigations of the role of land use/land cover change and SDS;
- Interactions and impacts of SDS on plants/vegetation;
- The biomass productivity and agriculture under the stress of SDS;
- The detection, monitoring and forecasting of SDS, including early warnings;
- Spatial-temporal modeling of SDS issues by Geo-AI, machine learning, and remote sensing;
- SDS impacts on:
  - Water resources (lakes, wetlands, dam reservoirs, etc.);
  - Atmospheric parameters (cloud formation, precipitation, temperature, evapotranspiration, radiative forcing, etc.);
  - Soil and its microorganisms;
  - Biogeochemical cycles in water and soil;
  - Vegetation (forest, rangelands, and agriculture);
  - Human societies and other living organisms;
  - Ecosystem productivity.

### Guest Editors

Dr. Ali Darvishi Boloorani

Prof. Dr. Alfredo Huete

Prof. Dr. Alireza Rashki

Dr. Najmeh Neysani Samany

### Deadline for manuscript submissions

closed (30 October 2022)



## Atmosphere

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## 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!

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### Editor-in-Chief

Dr. Daniele Contini

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