

Special Issue

Land Surface Dynamic Mechanisms and Anthropogenic Facility Disasters Caused by Sand/Dust Processes

Message from the Guest Editors

Under the current background of the rapid development of new energy, road, and other projects in arid and semi-arid regions, the research demand for the mechanism and protection of aeolian sand/dust has increased rapidly. This Special Issue is devoted to all topics related to sandy landform dynamic mechanisms and anthropogenic facility disasters, including (but not limited to) the following subjects:

- Dynamic model of aeolian sand/dust movement;
- Long-term field observation on wind-blown sand/dust around anthropogenic facilities;
- Causes of aeolian sand/dust disasters on anthropogenic facilities;
- The impact of sand/dust transportation on the efficiency of photovoltaic/wind power generation;
- The influence of surface deposition of sand/dust on roads and power transmission lines;
- The formation and evolution of sand/snow dunes;
- New methods and technologies for the prevention of aeolian sand/dust disasters;
- Failure mechanisms and effectiveness evaluations of prevention measures;
- New water-saving irrigation technology for plant-based sand disaster prevention;
- Optimization of a comprehensive protection system for sand/dust disaster.

Guest Editors

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Deadline for manuscript submissions

31 December 2026



Atmosphere

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Impact Factor 2.3
CiteScore 4.9



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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!

Editor-in-Chief

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