



an Open Access Journal by MDPI

# Paleoclimate Changes and Dust Cycle Recorded by Eolian Sediments

Guest Editors:

# Prof. Dr. Yougui Song

State Key Laboratory of Loess and Quaternary Geology, Institute of Earth Environment, Chinese Academy of Sciences, Xi'an 710061, China

#### Prof. Dr. Chaofeng Fu

Key Laboratory of Western Mineral Resources and Geological Engineering, Ministry of Education of China, The School of Earth Science and Resources, Chang'an University, Xi'an 710054, China

Deadline for manuscript submissions: **31 October 2024** 



mdpi.com/si/185056

### Message from the Guest Editors

Dear Colleagues,

Paleoclimate study is of paramount importance in unraveling the Earth's climatic history and understanding the dynamics of our planet's past. The aim of this Issue is to collate original and novel research papers devoted variously to timescale paleoclimate reconstruction, dust events during the Cenozoic period based on the eolian sediments, and the effects of dust cycles on the local/global environment.

We encourage the submission of research manuscripts which focus on, but are not limited to, the discussion of the following topics:

1.Dating of eolian sediments (paleomagnetism, OSL, AMS 14C .....);

2.Dust resources identification and tracing, dust flux and dust sediment rate;

3. Quantitative methods of paleoprecipitation and paleotemperature reconstructions;

4. Dust storm and climate abrupt events;

5.Various time-scales (tectonic, orbital, suborbital, millennium, centennial, decadal) paleoclimate reconstructions;

6.History of dust emission, transportation, deposition and its influence on past climates;

7.Dust process and atmospheric circulations and its effects on ecosystem.

**pecial**sue

Prof. Dr. Yougui Song Prof. Dr. Chaofeng Fu Guest Editors





an Open Access Journal by MDPI

# **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

#### 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!

# **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)*)

#### **Contact Us**

*Atmosphere* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/atmosphere atmosphere@mdpi.com X@Atmosphere\_MDPI