

## Special Issue

# Applications of Mathematical/Statistical Techniques to Extreme Events

### Message from the Guest Editor

Extreme events (such as flooding, droughts, heatwaves, cyclones, wildfires, earthquakes, and volcanic eruptions) occur randomly in nature and are of high importance.

Growing scientific evidence indicates that it is becoming increasingly likely that the frequency, intensity, severity, duration, temporal ranges, and spatial extent of extreme events will change considerably in response to future climate change. This Special Issue invites original research articles, review papers, experimental work, case studies, and technical notes that feature novel applications of novel mathematical/statistical techniques for the analysis, visualisation, modelling, and forecasting of extreme events. Wider topics covering the application of mathematical/statistical approaches can include the following (though not limited to):

- Extreme events and projections of future climate change;
- Risk assessment/management for extreme events;
- Big data for extreme events;
- Clustering/cascading effects of extreme events;
- Socioeconomic impacts of extreme events, such as on critical infrastructures, the environment, longevity, pollution, and health and safety.

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### Guest Editor

Dr. Sandhya Patidar

School of Energy, Geoscience, Infrastructure and Society, Edinburgh  
EH14 4AS, UK

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### Deadline for manuscript submissions

closed (31 October 2020)



## Geosciences

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

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## About the Journal

### Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks,  
Fairbanks, AK, USA

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