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## Atmospheric Rivers from Modeling and Remote Sensing

Guest Editors:

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Deadline for manuscript  
submissions:

**closed (31 December 2023)**

### Message from the Guest Editors

Atmospheric rivers (ARs) are intense water vapor transport systems organized in long and narrow filament-shaped structures moving worldwide and usually contribute to the enhancement of precipitation intensity. ARs typically form over midlatitude regions, moving poleward from tropics then making landfall typically forced by mountains. Despite the improvement in the knowledge of ARs in terms of their dynamics, evolution, and impact on the precipitation rate, several scientific questions remain unexplored. This Special Issue aims to improve the knowledge of ARs through the publication of groundbreaking papers that focus on innovative and original research approaches.

Submitted articles may address, but are not limited to:

- Impact of ARs on heavy rainfall, heavy snowfall and associated floods over the midlatitude areas.
- Changes in the hydrological response of complex terrain due to ARs.
- A special focus on the Mediterranean basin: the features, occurrence, seasonality, and effects of ARs in this complex domain.
- AR-related storms in the context of climate change.
- ARs as a key operational product for nowcasting applications and flood risk management.



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# Special Issue



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## Message from the Editorial Board

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